CONSERVATION AND CONSUMPTION: CONFLICTED BEDFELLOWS IN SEA TURTLE CONSERVATION

by

Cherise Anne Chrispen

B.Ed., University of Saskatchewan, 2005

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS
IN
NATURAL RESOURCES AND ENVIRONMENTAL STUDIES
(GEOGRAPHY)

UNIVERSITY OF NORTHERN BRITISH COLUMBIA

April 2018

Abstract

This thesis explores relationships between consumption and conservation, via a case study of North American conservationists. I conducted an online survey (n=24), and examined respondent statements about their own consumption and that of others. Here, I consider these within contexts of community messaging, and related literatures (political ecology; consumption studies; social marketing). Four key themes emerge: 1) a primarily negative association with the term consumption, which influences and limits engagements with consumption; 2) mixed messaging about some encouraged consumption (e.g. sustainable seafood is promoted within this community, but is debated by respondents and researchers); 3) over-confidence in information provision as key to changing consumer behaviour, despite evidence to the contrary; and 4) limited recognition of ISTCC community success and power with respect to promoting and benefitting from "consuming to conserve" activities. This thesis ends with academic and applied recommendations for more comprehensive engagements with intersections between consumption and conservation.

Table of Contents

Acknowledgments

The first acknowledgment must go to my supervisor, Dr. Zoë Meletis. She took a chance on someone who had little research experience, limited knowledge about sea turtles, and inadequate familiarity with campus life. Although I came with life experience, my academic experience was severely limited and she helped and encouraged me to navigate academia and my master's experience.

A big thank you goes to Dr. Tracy Summerville, Dr. Annie Booth, and Dr. Phil Mullins. They encouraged and offered suggestions throughout this process. Annie suggested method choices that I had not considered. Tracy offered practical suggestions on the thesis-writing process, and how to better communicate with the reader. Phil offered authors and theories for potential inclusion where they were lacking; he particularly enriched my understanding of case studies.

Thanks must be given to those who supported this project: 1) the International Sea Turtle Society Executive and members for their welcome of my project, their members' participation, and stimulating conversation; 2) Northlands College for financial support and a wonderfully supportive network of co-workers; 3) my cohort; 4) the University of Northern British Columbia for supporting me financially, socially, and emotionally on this journey; and 5) Angela Plunz and Kory Morvik for help with editing.

This thesis would not be possible without the support of my family and friends. They encouraged me to take the leap to attempt this endeavour, and they assisted me with my daughter and home life while I was away. They listened to me when I struggled with the culture shock of leaving home, and encouraged me to continue when I felt like I could not take one more step. There are many to thank but I will only name a few: Georgette and Larry Chrispen, my parents; Kitt Chrispen, my inspiration for hard work and overcoming obstacles; Jennifer Hendry; Shelley Young and Rob Tesch; Jennifer Wyatt and Mike Habel; Bob and Heather Wyatt; Jen Frook; Kory Morvik; Erin Gordon; Angela Plunz; Lydia Troc and Julie Stankevicius. Many people in my life played a role in getting me here, and although I could not specifically name everyone, it does not mean I am not grateful. Thank you.

List of Tables

List of Figures

Introduction

The objective of this study was to examine relationships between personal consumption, conservation knowledge and values, and identity (including professional practice and/or volunteering). As a conservation-interested North American consumer, I am interested in how consumption and conservation interact. I wanted to consider relationships between conservation-related influences and stated personal consumption choices and behaviours, both at the individual and community level. To do this, I chose to use a case study involving sea turtle conservation.

Some elements of our North American consumption are known threats to sea turtle populations, and sea turtles are also very iconic and ubiquitous among consumer goods and services in North American. Sea turtles are well known charismatic megafauna that draw much attention from North Americans, even though only a minority of the population will ever have direct contact with these majestic oceanic dinosaurs. Some of those most connected to sea turtles in North America, are people who work and/or volunteer with sea turtles (e.g. researchers; rehabilitation workers; beach monitoring volunteers; staff members for conservation NGOs). Some of these people also maintain ties with a greater, international sea turtle conservation community (ISTCC). The ISTCC includes a well-developed conservation community via their on-line presences, and accessible membership to the ISTS or International Sea Turtle Society. The ISTS hosts an annual Symposium of Sea Turtle Conservation and Biology (referred to as a Symposium or the Symposia from this point forward), to help connect disparate members, and to share research, education, and outreach developments in person.

I decided to, via the 2014 Symposium and associated relationships, recruit a sample group of participants involved in sea turtle conservation, for my study. They would comprise a group that was well informed about sea turtle conservation, and directly implicated in conservation work. The sample group for this case study is composed of individuals who self-identify as both sea turtle conservationists and North American (from here on, I refer to the project participants as respondents). I limited the geographic area to North America, to try and delineate the predominate consumer culture of influence. This project drew from a review of relevant literatures, and my survey of international sea turtle conservation community (ISTCC) messaging (e.g. websites, newsletters), as well as respondent survey answers (n=24), and Symposia observations. I used the ISTCC literature and messaging data to help contextualize the results collected from 24 respondents (survey administered online in June – October 2015).

For the purposes of this project, I have chosen a broad definition of consumption, as I am both interested in the consumption of material goods and services, and the consumption of ideas, particularly as they relate to individual and group knowledge and identity. Consumption studies and definitions are predominately paradigm specific (e.g. economics, sociology, geography). Stern (1997) offers a broader definition for consideration, which better matches the scope of this project:

> Consumption consists of human and human-induced transformation of materials and energy. Consumption is environmentally important to the extent that it makes materials of energy less available for future use, moves a biophysical toward a different state or, through its effects on these systems, threatens human health, welfare, or other things people value (p. 20).

To illustrate, the purchasing and/or utilization of products and services is included in consumption, but the impact shadow generated along the way (from cradle to grave) should

also be conceptualized as being directly associated with the consumption of products and services that contribute impacts. For example, the production, shipping, purchase, and disposal of a plastic water bottle or a package of shrimp that is purchased at a local store should all be associated with consumption and its impacts. Some might also extend these impacts to include socio-economic and cultural impacts along the way as being inextricably linked to the central acts of consumption contributing to these impacts (Heyman, 2005).

Consumption can also refer to taking in information and/or one's surroundings. For example, you can consume the idea that turtles are human-like, and you can also believe that ecotourism is a great way to experience exotic locations in a "non-consumptive" way (sic). And, while on an eco-tour, you would be consuming, or taking in, vistas, views, experiences, and suggestions about the places, peoples, flora, and fauna involved (Urry, 1992). One of the main hopes I had in starting this project was that I would be able to examine and contemplate beliefs, actions, and behaviours of people living at a distance from sea turtle populations (e.g. not near nesting beaches). The consumption choices of these more distant consumers are nonetheless impactful on sea turtle conservation (both positive and negative impacts were of interest to me). I was interested in considering the wider impact shadows that might be influencing sea turtles and their conservation, and thinking about their links to everyday North American consumption. For example, plastics in the environment are known to negatively impact sea turtles via turtles getting entangled in them, ingesting them, or otherwise facing habitat destruction as the result of plastics in the environment (Hoarau et al., 2014; SanClements, 2014). For reasons such as this, I think that we should make greater efforts to connect more distant geographies of plastic consumption to the oceans and nesting

beaches where sea turtles live. Known connections between the consumption of plastics and seafood, and sea turtle conservation made these key topics in this thesis.

To date, much of the sea turtle conservation focus on attention to consumption behaviours is more directly to the beaches and waters that sea turtles inhabit. For example, this includes studies about the direct consumption of sea turtles (direct takes), and their ties to local consumption practices. Typically, the emphasis is on analyzing this direct consumption itself (attempts to quantify and/or qualify it), and/or contemplating how policy changes or changes in conservation-related policy, 'education', and enforcement might further restrict local consumption of related foods or landscapes (Joyner & Tyler, 2000; Schenk, Hunziker, & Kienast, 2007).

My project adopts a different approach by explicitly considering larger webs of consumption that affect sea turtle conservation. I draw attention to and investigate North American conservationist beliefs and actions, and discuss relationships between conservation (some of it on/near communities where efforts to curtail direct consumption of turtle products exist) and consumption far from sites where sea turtle-related interventions are likely to take place.

This work contributes to the expansion of the political ecology of consumption, by incorporating considerations of more distant actors/consumers and their potential impacts on sea turtles via consumption (Heyman, 2005). It also considers the consumption experiences (and restrictions on these) of conservationists and the relationships between these and distant targets of conservation measures that they support (turtles; turtle habitat). I consider ISTCC community messaging, as well as survey responses and response patterns, and examine how certain conservation messages or ideas do or do not appear. I also offer related

recommendations for the ISTCC, in terms of how to better understand, reflect upon, and take action with respect to ISTCC relationships with consumption.

As the later chapters on community messaging (Chapter 3) and survey responses (Chapter 4) reveal, conservationists sometimes question the impacts of their own consumption, but other times they do not. Respondent answer and explanations suggest that, perhaps not surprisingly, conservationists face pressures, influences, and conflicting priorities experienced by other North American consumers. Perhaps with this in mind, community members receive encouragement or support for certain actions and behaviours (desirable forms of consumption) from the ISTCC through direct communication, related literature, and media. They also get strong messaging about damaging consumption that should be avoided, for the sake of sea turtle conservation (e.g. the use of plastic bags, and their impacts; fish and seafood demand being associated with undesirable fisheries practices and resulting sea turtle bycatch).

In related literatures, conservationists are theorized by some as being caring, well-intentioned, and well-educated with respect to consumption-related threats to their fauna of interest (Clayton & Myers, 2009). In theory, therefore, they should be mindful of sea turtles and threats to them even while acting as consumers. Through the use of geography-based concepts such as "caring at a distance" (Barnett & Land, 2007; Silk, 1998) and the "geography of responsibility" (Barnett & Land, 2007; Popke, 2003), this project explores conservationists' stated consumption-related beliefs and practices collected via a voluntary online survey, and contextualizes this data with messaging from the ISTCC, including both promoted forms of consumption, and suggested restrictions to consumption seen as unacceptable according to ISTCC beliefs and values.

I make efforts to consider consumption and conservation with respect to the actions taken within the ISTCC, in addition to community goals and values. For example, a paper co-authored by 30 prominent members of the ISTCC attempts to identify sea turtle conservation and management priorities for the future (Hamann et al., 2010). These authors call for deeper investigations into individual behaviours and values in order to gain improved understanding of sea turtle conservation measures, and related education, and key socio-economic factors. Hamann et al. also highlight the need for research on the costs and benefits of conservation measures, and how those are distributed among populations (2010). My project will add knowledge to both of these priority areas in terms of its focus on the intersection of consumption and conservation, as perceived by a sample of sea turtle conservationists, and consideration of these relationships more broadly, as they relate to ISTCC messaging and other activity.

The following three main research questions guided my project, and are addressed in this thesis:

1) What types of consumption-related messages or narratives appear to dominate the ISTCC on the internet and at the Symposium to its own members and North American consumers? (see Chapter 3)

2) What are the stated conservation-related consumption behaviours and beliefs of respondents (a small subset of self- identified sea turtle conservationists from North America; n=24), particularly with respect to sea turtle conservation and consumption, such as plastics and imported seafood? (See Chapter 4)

3) What degrees of convergence and divergence exist between: a) consumption-related messages and narratives which dominate the ISTCC on-line presence; b) other observed consumption-related behaviours and messaging (e.g. during the 2014 Annual Symposium on Sea Turtle Conservation and Biology); and c) stated personal and professional consumption-related knowledge and beliefs of project respondents? (see Chapter 5)

After addressing these questions via considering the data I collected and the literature I read, I conclude this paper by offering suggestions to the ISTCC about topics they may want to reflect upon. I include recommendations about how the ISTCC might make use of available literatures and suggestions in this thesis to: 1) increase knowledge of their own community and actions within it; 2) refine effectiveness of some of their consumption-related communications with North American consumers; and 3) document and reflect upon their own consumption-related successes, and remaining challenges. Although this thesis is focused on the ISTCC, much of the material here may be relevant for other interested conservation communities and members as well, particularly those engaging in similar activities to those the ISTCC participates in, such as the promotion of "consuming to conserve" as a key fundraising component for conservation work.

Chapter 1 – Methodology, Framework and Methods

This chapter will explain the methodology, theoretical framework, and methods used to complete this project. The final section of this chapter will discuss the limitations of project design.

Methodology: A Qualitative Case Study

Denzin and Lincoln (2011) state that "qualitative researchers stress the socially constructed nature of reality, the intimate relationship between the researcher and what is studied, and the situational constraints that shape inquiry" (p. 8). Qualitative research emphasizes interest and respect for voices, and researchers take care to not overgeneralize. Despite having generated research questions to act as starting points for this project, I remained flexible and adaptable to new questions as they arose. I deemed this approach to be appropriate since shifting research foci in response to cues during the research process is important when undertaking qualitative work about beliefs, values, and behaviours (Bradshaw & Stratford, 2010; Creswell, 2007; Denzin & Lincoln, 2011; Dowling, 2010). My fundamental goal was to respect voices from within this community of conservation experts, while looking for response patterns. My hope was to offer insights into the greater group and the stated personal consumption beliefs and behaviours of sea turtle conservationists, through analyzing survey responses.

This thesis presents information from relevant literatures about consumption and conservation, and compares this information with respondent data, as well as researcher observations and analyses. This grounding offers opportunities to contemplate the greater moral climates and messaging that respondents are likely exposed to, and to think about their responses in association with this context. I used data gathered from the ISTCC (e.g.

websites; academic papers) to inform survey design, data analysis, and discussion of respondent perceptions. I considered community messaging as being among possible influences on the respondents' dual identities as conservationists *and* consumers from North America.

My method choices and overall project design were influenced by works on the political ecology of conservation and of consumption, and other consumption-related scholarship. This case study should not be viewed as a necessarily generalizable study, applicable to all sea turtle conservationists, or even to all North American sea turtle conservationists. Rather, I used this case study to explore consumption and conservation-related themes among the population of North American sea turtle conservation community (NASTCC).

Case study. Case study research is explained by Baxter (2010) as involving the study of a small group of actors from a larger community in an effort to explore in-depth nuances of the larger community and contextualize those within the influences on and explanations from that community. The four parts of a case study as a methodological approach are outlined as: (a) selecting a research focus (e.g. group, organization, community); (b) ensuring entrance to that research focus; (c) outlining a theoretical framework that matches research focus and objectives; and (d) gathering, processing, and analysing data to meet research objectives (*Encyclopedia of Case Study Research*, 2010).

This thesis investigated the intersection of consumption and conservation, using 24 sea turtle conservationists from North America as a sample within the larger ISTCC to explore relationships between individuals and the roles they play, groups to which they belong, and messaging they receive, about both consumption and conservation. This sample

was particularly attractive because of: 1) the prominent and accessible community messaging about consumption and conservation through electronic means, 2) my prior knowledge (via Dr. Zoë Meletis and others) of their sometimes self-reflexive engagements with consumption and openness to healthy debate, and 3) their known successful capitalization on consumption via fundraising-related 'consume to conserve' campaigns (Braverman, 2012).

The Encyclopedia of Case Study Research (2010) lists the characteristics of a case study as: (a) an analysis of the relationship between the context and the study sample being considered; (b) a focus on the interrelationships that create the context for the study sample; and (c) a research focus on contributing to theory. The use of a case study was appropriate for this project as it allowed me to: (a) contextualize respondents' stated consumption-related beliefs and behaviours within the ISTCC messaging and North American consumer culture; (b) analyze ISTCC messaging using several perspectives: relevant literature, comparisons with online messaging, and my observations at the 2014 Symposium; and (c) frame this discussion such that I might contribute to existing literature and theories, such as geographies or responsibility and caring (Silk, 1998) and political ecology of consumption (Bryant & Goodman, 2004).

Case studies are idiographic research, so the typical focus is on depth rather than breadth of data (Baxter, 2010). Therefore, I was attentive to obtaining rich data in the form of personal comments about knowledge, feelings, and actions. I was not aiming for a large, random, representative sample of the overall community. Rather, my primary aim was to learn about conservation and consumption through a small sample, looking for emerging patterns and common ideas, while also emphasizing individual voices. To lend greater perspective to the small sample in this thesis, I contextualized the survey data within

narratives and discourse found in the greater ISTCC (e.g. online; articles), which allowed me to better situate ideas and understandings suggested in survey answers (Creswell, 2007).

External validity, whether referring to generalizability or transferability, is considered to be a weakness of case studies (Bailey, White, & Pain, 1999; Baxter & Eyles, 1997). Some scholars state that if the presented data-derived ideas cannot be transferred elsewhere, then case studies are of limited value. According to Baxter (2010) and Creswell (2007), however, transferability is generally difficult to achieve, given that dealing with humans means that theories may not hold up in all cases regardless of efforts made to generate a more easily generalizable sample. The strength of qualitative research is in its depth—case studies can be presented and discussed in terms of whether a particular theory holds true in the communities portrayed, and researchers can contemplate the details and nuances within the case. I agree and believe that small case studies such as this project add valuable material to the explorations of social theories. Further, it has been drawn to my attention that this thesis might be an interesting resource for groups and communities outside of the ISTCC (e.g. dolphin conservation NGOs; environmental advocacy groups) engaging or hoping to engage in activities like these of the ISTCC.

Definition of North American sea turtle conservationist. The sample for this project is composed of North American sea turtle conservationists. North American in this case refers to anyone who self-identified as North American. For example, a person born in Canada but living in Costa Rica, who self-identifies as North American, fits the criteria. The term ‘conservationist’ is used because people hold myriad roles within the sea turtle conservation community (e.g. researchers from a variety of disciplines, volunteers, conservation educators, interns, or assistants). Conservationist as I used it included all self-

identified sea turtle conservation workers and volunteers who consider themselves to be actively contributing to conservation. The sea turtle conservationists from North America who voluntarily completed the survey are generally referred to as 'respondents' in this document.

Theoretical Framework

This case study integrates theory and concepts from political ecology and the geography of consumption. Political ecology allows for the consideration of the politics of North American consumption-related conservation measures and actions. It also provided opportunities for explorations of power dynamics related to consumption in overlapping contexts of North American consumer culture and international conservation efforts and campaigns. Another reason that I chose to use political ecology was because of its emphasis on finding 'ways forward' in addition to analysing environmental relationships and their shortcomings (Robbins, 2012). Beyond offering simple critiques, some political ecologists also emphasize the need for suggestions of more progressive policies, actions, or alternative paths, and these sometimes are included in their works. Geography of consumption allowed me to incorporate concepts of space, place, time, and identity into this case study. It also offered theorizations of consumption that consider how distance and proximity from actions and issues can affect caring and responsibility, and how consumption can be seen as a political and ethical act: one of caring, and one that is connected with identity (McEwan & Goodman, 2010; Popke, 2006).

Political ecology. Political ecology is a broad sub-discipline or approach that provides theory, concepts, and tools for analyzing the relationships between the environment and politics (*The Dictionary of Human Geography*, 2009). As Robbins (2012) states:

> These are the questions of political ecology, a field of critical research predicated on the assumption that any tug on the strands of the global web of human-environment linkages reverberates throughout the system as a whole… All share an interest in the condition of the environment and the people who live and work within it. These researchers, moreover, advocate fundamental changes in the management of nature and the rights of people, directly or indirectly working with state and non-governmental organizations (NGOs) to challenge current conditions (p. 13).

Political ecologists tend to view nature as constructed or produced through culture, politics, decision-making, and discourse. For example, while experiencing the same tree, one person may view the tree as wonderful and a shade provider, while another sees it as an unwelcome presence on a beach area (Robbins, 2012). Each individual experiences a set of influences and ideas (e.g. cultural, religious, political, and experiential) that inform the ways in which they understand and experience the environment. Political ecology is a useful lens for considering the politics behind conservation measures, narratives, and common practices. It is also useful for understanding conservation, and perceptions of environment, as linked to conservation science, goals, and campaigns.

Robbins (2012) describes four basic foundational points for grounding political ecology critiques of conservation and its measures, particularly in association with parks and their roles in conservation at various scales. First, political ecology reveals that the establishment of parks and other anthropogenic boundaries, often partnered with the establishment of groups to enforce rule, are often dictated by external actors and funders, and reflect external social norms (e.g. western conservation values) and ecological outcomes (Cronon, 1995). Second, political ecologists emphasize conservation and its components as

often representing a loss or disruption of "moral economy" (Thompson, 1993) and/or "social capital" (Bourdieu, 1986). Third, political ecologists problematize the construction of 'nature' and what it 'should be' as represented by conservation goals, policies, and programs. They draw our attention to such constructions by investigating their origins, and illustrating their incompatibility with alternative constructions. For example, critiques of popular sea turtle conservation narratives about ecotourism as representing welcome successful alternative economies (Campbell, Gray, & Meletis, 2008; Meletis, 2007; Young, 2003). Finally, political ecologists, many of whom are geographers, draw our attention to ideas of space, and remind us that conservation areas, targets, and measures often focus on a small or narrow area, idea, or species, without paying attention to ecological and social systems (Simon & Alagona, 2013). In doing so, they expose the politics and sometimes hidden influences in conservation, providing a more comprehensive and honest understanding about how conservation works and does not, both in theory and in practice.

Geography of consumption. As global consumers, increasingly forced to contemplate the impacts of consumption levels (e.g. through consumption-related TV documentaries or activist videos shared on social media), affluent people in wealthy nations can experience both guilt and greed in terms of their personal consumption and its potential impacts (Heyman, 2005). North American consumers continue to shop to satisfy cravings or emotional motivations in spite of exposure to plentiful information suggesting that for ethical and environmental reasons, they should reduce or eliminate consumption. One of the reasons we can continue to shop is that many of us are largely sheltered from the negative impacts of consumption. The Internet, television, and other media make it easy to access and be subjected to information linking many of our consumption choices with ecological and social

impacts, positive and negative, far beyond ourselves and local geographies (Carrier, 2004; Dauvergne, 2008, 2010; Eisen & Green, 2012; P. Jackson & Thrift, 1995; T. Jackson, 2006; Lury, 2011; Miller, 1995; Simon & Alagona, 2013). Despite easy access, consumption of unnecessary and arguably harmful purchases, including the consumption of disposable and semi-disposable goods, remains a largely sanctioned practice in North America (Simon & Alagona, 2013). Consumption-oriented activist and informational campaigns address our cultures of consumption by commenting on common practices and suggesting alternatives. For example, 'buy local' campaigns suggest consumers should emphasize purchasing products grown or constructed in close proximity to the consumers themselves, in order to support local economies and/or reduce undesirable impacts (e.g. carbon costs of transportation; environmental and social costs of production). Campaigns to redirect or improve consumption are far more common than those asking us to reduce or challenge consumption.

Playing upon consumer guilt is a key tactic in consumption-related education and awareness raising campaigns. Hayman (2005) writes: "In particular, anxieties about environmental damage in overdeveloped nations – indeed, I would say the projection of guilt from the self onto others – helps non-governmental environmental organizations raise money and form conservation policy in the underdeveloped world" (p. 114). The guilt felt in affluent countries, such as the United States and Canada, and actions taken based on such feelings, can lead to policy development that impacts other societies. On the other hand, one can critique such campaigns as having limited effect. Numerous programs or campaigns create ways for consumers to feel good about helping the environment (e.g. buying fair trade products), without changing greater cultures and practices of consumption. For example,

consumers might not necessarily get the message or feel the need to restrict their own personal consumption habits. Further, "better" alternatives suggested to potential consumers might represent relatively comfortable and easy choices for consumers, rather than radical changes likely to have great effect or to demand greater change or sacrifice on the part of the consumer (Carrier, 2004; Heyman, 2005).

Consumption activities are grounded in space and time—geographies of production and consumption exist and impact our understandings of consumption, even if much of the supply and demand side chains and associated relationships are obscured and hidden (P. Jackson & Thrift, 1995). Considering the entire sequence of how something is produced, purchased, used, and finally discarded, recycled, or reused, helps us to better understand networks and relationships among people, resources, impacts of consumption, and our conceptualizations of such relationships. However, the average consumer is not necessarily privy to such commodity chain tracking activities.

The inclusion of space, place, and personal choices as key factors within theoretical analyses of consumption is central to much work on the geography of consumption (P. Jackson & Thrift, 1995) and political ecology (Robbins, 2012). These will be central concepts within this thesis for identifying patterns and themes within the data. Their influence begins with data collection, and continues throughout the analysis of both the collected survey data and greater suggestions about ISTCC messaging. Both political ecology and the geography of consumption offer insightful terms and ideas for better understanding North American consumption and how it is related to greater conservation practice and goals. They are particularly useful for pointing out links not made, or relationships and activities

left out of the spotlight, when prompting consumers and conservationists for consumption-related changes.

Data Collection Methods

I will detail the methods and the results in the following order: ISTCC messaging, Symposium observations, and then the survey. The discussion links all of these data sets to explain, compare and contrast the findings. Finally, I summarize the key findings in the conclusion and provide some suggestions for the ISTCC to consider, as the community moves forward.

In order to explore relationships between conservation, consumption, and related beliefs at both the individual and group level, I chose to survey sea turtle conservationists. I was mainly interested in people's own explanations of consumption and its relationships with conservation. I wanted to know whether and how they choose to explicitly contextualize their own consumption within the greater system of ISTCC messaging, or not. For this reason, I chose to survey self-identified North American sea turtle conservationists. I focused on the region of North America to limit consumer cultures and media influences, and to ground the discussion of their survey responses within a shared greater context. I particularly wanted to consider survey response patterns with respect to greater contexts of 'consumption messaging' that people receive in their various life roles (e.g. parent; citizen; spouse; professional). As a North American citizen and consumer myself, I am familiar with the general consumption climate and messaging received. I have also read about it in related literatures.

International sea turtle conservation community online observations. I began research for this project as an outsider to the ISTCC, with little knowledge of its community

messaging or common practices. As the project evolved, I learned through online observation, and gained quasi-insider status through Symposia attendance (2014 and 2015). I shook hands and conversed with group members, as I participated in the Symposia, and became versed in group activities and concerns. I attended the Symposia in order to research the community, recruit the sample to complete the survey, and to update the ISTCC on my results (in 2015). Furthermore, through the survey responses, respondents shared parts of themselves (e.g. stated beliefs, actions) with me. Dwyer and Buckle's (2009) article state that:

> The intimacy of qualitative research no longer allows us to remain true outsiders to the experience under study and, because of our role as researchers, it does not qualify us as complete insiders. We now occupy the space between, with the costs and benefits this status affords (p. 61).

Therefore, overall, I held the status of insider-outsider or the "space between" (Dwyer & Buckle, 2009). Within this chapter, I will discuss how I was both an insider and outsider.

The observation method that I used in this project falls somewhere between participant observation and observation, but does not rest neatly within either category. These forms of observation that I used do not fit neatly into methods-related descriptions in the literature. Participant observation is commonly used to gain insights 'on the ground', through intimate and long-term observations and interactions, in which researchers are viewed as members of the group. It is seen as effective for adding in-depth knowledge about local context, particularly to inform context-appropriate interpretations of local happenings and statements, because the researcher is quite immersed in the context (Bryant & Goodman, 2004; Campbell, 2007; Meletis & Campbell, 2007; Simon & Alagona, 2013). I did not feel

that I ever attained a great degree of immersion in this group, but I did grow familiar with some aspects of it.

Another reason that the type of observation that I used is difficult to delineate is that some of my observations were conducted in person, but much of it was conducted online. Since my goal was to conduct research about sea turtle conservationists affiliated with various groups, organizations, and institutions (e.g. universities; state wildlife-related departments), the Internet presented valuable opportunities to interact with individuals and groups at a distance—breaking with traditional understandings of participant observation, which require direct proximity. Observing via the Internet allowed me into various venues and tools (e.g. listservs, websites, online chats, published articles) to better understand this community, despite my remaining in northern BC. So in a way, it allowed me to escape my geography and conduct observations from afar.

I was able to observe online patterns in combinations of texts and images used to convey information about current trends and focuses within ISTCC messaging. I emphasize the ISTCC because conservationists from North America are included in this community, are influential actors within it, and because it is not easy to focus on North American-only messaging, as sea turtles and sea turtle conservation efforts cross international boundaries. In my online observations, I noted the jargon and other language used, as well as omissions from online exchanges about conservation and/or consumption (e.g. referring to direct takes as consumption, however, leaving consumption out of tourism messaging). My observations focused on consumption-related communication and ideas (e.g. the promotion of ecotourism as non-consumptive; discussions of proposed or existing restrictions on turtle consumption; and the sharing of information about particular consumer items of concern, such as plastics

and seafood, and statements about their connections with threats to sea turtles and related conservation efforts). These observations provided me with context and insights into conservationists' community views of these topics, and the diversity that exists within the NASTCC. I began my observations before conducting my official fieldwork since this information was readily available (i.e. public, not private) to anyone with access to a computer, and offered knowledge that was essential in developing my survey (McGuirk & O'Neill, 2010).

Weekly, I perused North American sea turtle conservation webpages, read related community email newsletters, and followed sea turtle conservation organizations and related experts on Twitter, Facebook, and blogs. I chose these conservation sources by first starting with the main central site, seaturtle.org. From there, I found links and joined Facebook and Twitter pages which allowed me access to new sites. I took notes on these, and added entries into the NVivo software package as they appeared in my email, on my Twitter feed, or on Facebook. I took screen shots of websites or downloaded information when available. I had several codes already established, and I added more as new material came my way. One item could have multiple codes attached to it, such as helpful or consume to conserve. Table 1.1 (p. 21) contains organizations that I followed and read about for my Master's thesis (Nov. 2013-August 2015).

Table 1.1 International sea turtle conservation community's websites viewed

ISTCC's Websites Viewed	
Organization	**Website**
Canadian Parks and Wilderness Society	www.cpaws.org
Canadian Sea Turtle Network	www.canadaseatrutle.wordpress.com
Conservation International	www.conservation.org
Gulf World Marine Institute	www.gulfworldmarineinstitute.org
Maui Ocean Center	www.mauioceancenter.com
Monterey Bay Aquarium - Seafood Watch	www.seafoodwatch.org
Oceanic Society	www.oceanicsociety.org
PRETOMA	www.pretoma.org
Save the Sea Turtle Inc.	www.saveturtles.org
Sea Shepard	www.seashepard.org
Sea Turtle Conservancy	www.conserveturtles.org
Sea Turtle Exploration	www.seaturtleexploration.com
Sea Turtle Inc.	www.seaturtleinc.org
Sea Turtle Preservation Society	www.seaturtlespacecoast.org
Sea Turtles Forever	www.seaturtlesforever.org
SeaChoice	www.seachoice.org
SEATURTLE.ORG	www.seaturtle.org
SEE Turtles	www.seeturtles.org
SWOT	www.seaturtlestatus.org
Turtle Island Restoration Network	www.seaturtles.org
Vancouver Aquarium - Ocean Wise	www.oceanwise.ca
Wild Whales	www.wildwhales.org
WiLDCOAST	www.wildcoast.net
World Wildlife Fund	www.worldwildlife.org

My rationale for observing the ISTCC in this manner was that the Internet is one of the main information sources that North Americans turn to when seeking data. It also includes various accessible sources and platforms for people to engage with sea turtle conservationists. Websites, Twitter feeds, and blogs can also be seen as the 'faces' that conservation organizations and individuals present to the world and can therefore provide insights into group or individual beliefs and actions (Kwon & Sung, 2011; Waters & Jamal, 2011).

Symposium observations. While recruiting survey respondents, I also collected observational data, as a 2014 Symposium attendee. I mainly interacted with people at my project information booth, engaging in casual conversations and participating in both professional and social events throughout the conference. I made detailed notes about my observations. No names or identifying information were included. The resulting notes informed my analysis by adding context, and allowed for some context-related triangulation.

Observations about conservation and consumption messaging as well as observations of community material culture that I made during the Symposium allowed me to gain first hand insights into ideas that I had been reading about (e.g. I noticed popular clothes worn; popular accessories and iconography). My goal was to witness and contemplate sea turtle identity-related consumption and social norms within this group generally, rather than to focus on particular individuals. I wanted to get a sense of general practices and patterns, common and shared definitions of terms such as "consumption", and an understanding of the extent of the species-specific focus on sea turtles within greater conservation concerns among group members.

Observations by a relatively external observer can have advantages, such as offering greater objectivity. In this case, I did obtain some distance from the ISTCC consumption culture (Kirpitchenko & Voloder, 2014). I was a Symposium outsider in 2014 to some extent as it was my first Symposium, and I was not known to most attendees. Therefore, I was able to make consumption-related observations that others may have missed. At the same time, by the end, and through my relations and those of my supervisor, I gained a quasi-insider perspective. Members of a group sometimes follow or are blind to conventions or common practices, and do not spend time thinking about or questioning common practices, their roots,

or their impacts (Robbins, 2012)—so feeling half-in and half-out or inhabiting the "space between" (Dwyer & Buckle, 2009) with this group was a useful lens for informing my interpretation and my project overall.

Survey recruitment. Within my case study, I was interested in investigating a sample of people with shared beliefs and knowledge. I wanted to examine how conservation and consumption play out at the individual level, contextualized within greater practices and messages of the larger community. With the ISTCC as my chosen community, I decided to sample individuals who self-identified as North American. I made this choice to scope geographically to facilitate the contextualization of responses within one meta consumer culture (*Encyclopedia of Case Study Research*, 2010) and to move the focus beyond the beaches where much of the current consumer-focused consumption-related literature is concentrated. Thus, while respondents were recruited internationally, and may have replied from different places, they should be considered as belonging to the same North American consumer/conservationist sample. As a North American, I also had partial insider perspective, since I am surrounded by the same general consumption practices and messaging as my respondents (Gilbert, 1994). The survey emphasized open-ended questions in order to encourage participants to explain themselves, using their own words, so that they could be free to suggest responses not directly elicited by question wording.

Even in qualitative research, it is helpful to know the population size from which one is sampling. Pinning down the exact population size of this group was difficult, as people move in and out of sea turtle conservation-related work and volunteerism, as well as ISTS membership, and Symposia attendance. Further, while people can and do move out of the community (e.g. by switching their focus to sharks rather than sea turtles), they may remain

connected and involved in lesser ways. Seaturtle.org, a key organizational and technological hub for the group, had approximately 25,000 international registered members in 2014 (Seaturtle.org, 2014b). These are people, including myself, who registered for email updates from Seaturtle.org to keep up with news of and from this community. In 2014, Seaturtle.org also included 149 registered sea turtle research and conservation groups outside the U.S. and Canada, 75 registered in the U.S., one registered in Canada, and one other Canadian organization registered in Costa Rica. (Seaturtle.org, 2014a). ISTS, a subset of the ISTCC, had close to 1600 international registered members in 2014 (International Sea Turtle Society [ISTS], 2014). To attend the Symposium, one must purchase membership into the ISTS.

Some of the previous Symposia held in the United States (generally known to draw larger attendances than internationally-hosted Symposia) drew approximately:

- 900 attendees at the San Diego Symposium in 2011 (Seminoff, 2011);
- 1050 participants in Baltimore, Maryland, in 2013 (Tucker et al., 2013); and
- 785 participants from 73 different countries in New Orleans, Louisiana in 2014 (Valverde, 2014).

While imprecise, these numbers offer indications about the sizes of groups that a North American sea turtle conservationist might engage with, in terms of accessing international sea turtle conservation discussions (or Symposia). These numbers are vast underestimates however, and do not include potential thousands of people involved in sea turtle conservation through paid and unpaid work, or group affiliations at local, regional, state, and national levels, organizing or communicating within the US, Canada, or Mexico.

Due to my interest in generating a qualitative case study, as well as the constraints of my limited Master's degree sampling windows and the busy nature of the Symposium, I

attempted to use convenience sampling to recruit potential respondents. I collected email addresses, and later emailed potential respondents a link to the survey. Therefore, I left voluntary survey completion up to each individual.

Convenience sampling involves choosing a specific place and time to recruit participants that happen to be in a particular place and time. In this case, attending the Symposium allowed me to approach conservationists from several different parts of the world who would not normally be together in space and time (Bradshaw & Stratford, 2010). I combined this one-time event-related recruitment opportunity with online recruitment in various forms and places. Generally, I employed purposive sampling, as most people attending the Symposia are sea turtle conservationists—the general category comprising my population (McGuirk & O'Neill, 2010). I restricted the sample to North Americans within this greater community.

During the 2014 Symposium, I had a table promoting my project in an area frequented by attendees between sessions. I approached people less formally, briefly explained my project, collecting email addresses of prospective participants, and offering contact information. I also used opportunistic and snowball sampling—I asked potential respondents to suggest the survey to friends and colleagues, and to consider sharing the link to the online survey. Snowball sampling involves respondents recommending other people (Bradshaw & Stratford, 2010).

Online recruitment. My supervisor is an active member of this community and aided the process by acting as a gatekeeper (Campbell et al., 2006) for this project, facilitating networking and participant recruitment on-site and post-Symposium. She also helped to promote the project and solicit participation via her email and social media networks.

Furthermore, I included a recruitment project description on seaturtle.org, a key networking and reference-sharing site for this community.

I was able to recruit 42 prospective participants in person at the Symposium by acquiring their email addresses. I deployed general and individual electronic invitations, with repeat messaging, to invite people following my presence at the Symposium. My geographic scoping to North America eliminated several of the people who were keen to participate. While this decision was made to allow me to better contextualize the results within North American consumer culture, it made project recruitment more difficult than expected. Most sea turtle nesting beaches are outside of North America, so many sea turtle conservationists do not self-identify as North American. Moreover, most Mexican people that I encountered reported not considering themselves to be North Americans, and only one person from Mexico agreed to complete my survey.

I wanted to gather as many surveys as possible, within compelling time constraints, in order to obtain diverse respondents with respect to both their geographic home-bases, and possible responses. I attempted to ensure that I heard 'enough of the voices' to establish possible patterns in stated behaviours and thoughts (Bradshaw & Stratford, 2010). I sent out emails with the project link and invitation to these 42 email addresses on a monthly basis, from June through October of 2014. By November 1, 30 surveys had been registered by FluidSurveys, the software/site I was using. Ultimately, I could only use 24 for the analysis.[1]

[1] I deemed six surveys to be 'incomplete' as these respondents had begun completing the survey, but only ended up completing the first four demographic background questions or fewer. These surveys contained no data related to consumption.

Survey. In addition to observing members of the community of interest, I conducted online surveys. Surveys are useful tools for gathering original information (e.g. insights into values, attitudes and social trends) from groups of people, which can be incorporated into research on consumption (McGuirk & O'Neill, 2010). A survey can also be flexible and increase ease of interaction on the part of the participant. For example, a self-completed survey can allow participants to determine the amount of time they choose to spend completing it (McGuirk & O'Neill, 2010). I wanted my data-collection method to be flexible and unobtrusive while still allowing for some depth in respondents' answers (W. S. Harvey, 2010) because I was sending it to busy workers and volunteers. I chose to use an online survey option through FluidSurveys (www.fluidsurveys.com), which gave my voluntary respondents control over the environment and time that they used to participate.

An online survey held several advantages for this particular case study. Members of the ISTCC are generally technologically savvy and have a substantial online presence in the form of websites such as www.seaturtle.org and www.conserveturtles.org. I also chose an online survey because it fit well with the busy members' lives of my study group. Further, it allowed me to promote and distribute my data collection tool over vast distances with minimal effort and cost. The Symposium lasted less than a week. By focusing on recruitment for my project, as well as on my general observations, my presence was less intrusive. I was also able to build relationships with attendees on site and follow up electronically at a later date. Learning about the community's online presence and attending the Symposium informed my interpretation of the results.

The use of online surveys is theorized as increasing respondent comfort and openness (Wright, 2006). Given the sometimes sensitive nature of consumption and conservation-

related questions, I hoped this decision would help to invite participation. I knew some issues had the potential to be sensitive for members of this community, due both to the pressures and messages about certain behaviours being seen as desirable or undesirable within the ISTCC (and more generally). Hookway (2008) suggests that the anonymity offered by online access generally decreases self-consciousness. My survey asked about personal consumption habits and perceptions, which can differ from professional expectations. I felt that online surveys would offer respondents a safe, comfortable, anonymous way of participating.

The survey (see Appendix A) addressed areas such as respondent demographics; personal history with sea turtle conservation; knowledge and perceptions of sea turtle conservation campaigns and programs; and behaviours and beliefs about the consumption of plastics and seafood. I constructed each question carefully, aiming to make them concise, clear, and complete (McGuirk & O'Neill, 2010).

One of the greatest limitations of closed questions, especially when used in a self-administered survey, is the inability to control for different understandings respondents may have when reading and interpreting questions. I could not fully control for this limitation since I was not present to offer prompts, answer questions, or otherwise assist respondents. However, I included answer options such as ‘other’ and ‘I don’t know’ to afford greater flexibility and creating spaces for alternative interpretations or additional comments to be shared (McGuirk & O'Neill, 2010). I also piloted the survey with three individuals to try to minimize any lack of understanding. Upon reflection, I wish I would have piloted the survey questions with members of the population, or even sample group, to have a better understanding of potential areas of miscommunication or sensitivity within the survey.

Although some questions were closed or allowed for limited answers, the survey was mostly composed of open-ended questions. I made this choice to allow for deeper probing of ideas. I appreciated that open questions can include more opportunities for contextualizing statements (McGuirk & O'Neill, 2010). I thought respondents might speak to community messaging in such spaces, for example. Qualitative research captures and appreciates 'partial truth' (Clifford, 1986), including opportunities for small pieces of analysis to be considered on their own. Throughout this project, I tried to highlight respondents' own words as much as possible. I wanted to know the contexts or explanations they would offer for their own thoughts and behaviours about consumption, whether discussing community messaging, their own consumption, or consumption more generally.

Within my online survey, I asked multiple questions about the same or similar topics for triangulation purposes (Bradshaw & Stratford, 2010; McGuirk & O'Neill, 2010). For example, the survey asked generally about consumption-related threats to sea turtles, but also asked about personal consumption habits. I took great care to word questions about personal consumption habits to not induce guilt or shame from respondents. Instead of asking if the respondent ever eats shrimp, I worded the question as a hypothetical scenario. These questions represent different and complementary opportunities for addressing issues, behaviours, and beliefs. Analysis included examining combinations of answers and patterns across questions, rather than simply focusing on questions in isolation. This type of analysis is meant to garner greater confidence in the results, and allows for sets of complementary information that can be incorporated into interpretations (Bryman, 2004).

Additional methods (not used for data collection). My project also included a research project blog and graffiti board. No results were drawn from these. Rather, they

served as tools to introduce myself and the project to members of the community, through the Internet (blog) and the Symposium (table with graffiti board), and as venues for them to communicate with me (or not).

Graffiti boards have typically been used in fields such as health (Tracy, 2005) and education (Irvine et al., 2008). They are commonly used to capture one-time samples of public opinions and feelings about proposed or existing activities, in an accessible fashion. Tracy (2005) describes a graffiti board as a place where individuals are invited to write down their perceptions about a topic, in a particular moment. It can be used to generate discussion or debate by sharing comments somewhat anonymously (Tracy, 2005).

I used a graffiti board as part of my recruitment table at the Symposium to draw people to my table, and engage them in conversation about my project. My graffiti board consisted of a large piece of paper attached to a display board, which invited people to pick up markers and respond to topics on the board. As the nature of a graffiti board is to be open and free (Tracy, 2005), I did not limit participation to North Americans. To further encourage participation, I made markers and paper available throughout the conference, so that participation could occur even when I was not present. I presented a different question(s) each day, soliciting comments on it. Examples of questions were: (a) How are North American consumers an important part of sea turtle conservation?; (b) How can one person's consumption choices make a difference in sea turtle conservation?; and (c) What factors influence your decision to make a purchase?

After attending the Symposium, it was important to continue to interact with the ISTCC from a distance. Technology and media-based platforms seemed like good tools for achieving this goal, since sea turtle conservationists generally engage in online information

sharing. I used a project blog[2] to interact with the group, not for data collection. I also offered updates on my project, shared information, and welcomed questions or concerns. One of the most common arguments against blogs in research is the typical lack of confidentiality that they afford (Hookway, 2008). However, as moderator of the blog, I decided what was posted. I made it explicitly clear on the blog home page that I could not guarantee confidentiality, as the blog resides in a public domain. Since Hookway (2008) suggests that linking a project blog into the community is important to the effectiveness of blogs as communication tools, I listed a link to my website on www.seaturtle.org to help connect with the study population.

Data Analysis Methods

I will explain the data analysis methods used in the same order that I presented the data collection methods; 1) on-line observations of community messaging, 2) Symposium observations, and 3) survey responses.

Discourse analysis of online observations. To elicit themes from the online sources that I consulted, I used discourse analysis, which is commonly used in political ecology. Scholars often employ it to determine conservation and consumption-related discourses or vocabularies present, and to gain a better understanding of more common and less common messaging. They also tend to contemplate the influences and power relations reflected in texts, as well as their origins and reach or spheres of influence (Bryant & Goodman, 2004; Heyman, 2005; Robbins, 2012).

---

[2] As per Grant Porter, e-Learning Coordinator at the University of Northern British Columba's Centre for Teaching, Learning and Technology, my project blog (https://blogs.unbc.ca/turtlesandconsumption) was set up through UNBC (personal communication, May 15, 2014).

Conducting discourse analysis involves analyzing texts for shared vocabularies, particular terms and trends of influence, and contemplating the roots of these. I documented and analysed my data using the computer-based qualitative social science program QSR NVivo. NVivo is qualitative software that allows visual images (pictures and texts) to be imported and grouped into a searchable database. This program allowed me to document, store, and comment on observations and discourses, to prepare texts for analysis, and to conduct triangulation between different data sets (e.g. observations online; observations at the Symposium). Table 1.2 (p. 33) lists the codes used:

Table 1.2 – Coding used for ISTCC messaging and Symposium observations

Codes	**Sub codes**	
Canada		
Conservation	Education	
	Newsletters	
	Poachers/nesting beaches	
	Previous successes	
Consume to conserve	Adoption/heroic	
	Contests	
	Donations	
	Caring	Double giving
	E-Shop or store	
	Other companies	Big companies
		Art
	Products made from recycling	
	Sponsors	
Ecotourism		
Environmental degradation	Balloons	
	Beaches	
	Ocean	
Fishing	Commercial	
	Direct takes	
	Sustainable seafood/labeling	
How you can HELP		
Government	Regulations/marine protected area	
Plastics	Recycle, reduce	
	Reject, refuse	
Sea turtle research		
Symposium	Conspicuous consumption	
	Primary association	

I started with a list of general codes (e.g. consume to conserve, ecotourism, fishing, plastics) and then added more as I noticed patterns (e.g. education, defining consumption, heroic and caring). I used these general codes and sub-codes in my analysis of community messaging, which helped to better contextualize and find patterns among the responses.

Data analysis of survey. Survey data, particularly that resulting from open-ended questions, lends well to the use of thematic coding of responses for data analysis. Thematic coding is commonly used to analyze participant responses, and to categorize them into larger themes, for discussions of contextualized interpretations of responses (Black & Cherrier, 2010; Cardoso et al., 2013; Meletis & Campbell, 2007). I was particularly interested in whether participant-declared behaviours and values would fit with general consumption-related messaging in greater North American society, and also with respect to their conservationist identities. I also wanted to create spaces for other themes and patterns to appear. Although I had preconceived notions about what I expected to read in survey responses, based on my literature reviews and other observations, I conducted my analysis iteratively, using repeated interactions with the data to extract and refine themes (Bradshaw & Stratford, 2010; Creswell, 2007). I considered these in comparison with what I had expected or read.

I coded survey responses, and categorized patterns and themes, both in individual surveys and across the group of surveys (Cope, 2010) using NVivo QSR software. This sample of North American sea turtle conservation community (NASTCC) linked to the greater ISTCC, was meant to be multi-layered, which allowed for combining different types of data, encouraging triangulation within and between methods, and creating interesting opportunities for cross-analysis (e.g. between what people stated, vs. what observations suggested, vs. community messaging about consumption). Creswell (2007) describes the process for analysing the data within qualitative research, and a case study specifically, as taking on the form of a spiral. Beginning with data management and organization, researchers then sort through the data, making notes and forming initial codes, which are

inputted into NVivo (Cope, 2010). For example, some initial level descriptive codes used for my analysis were “ecotourism”, “plastics”, “consume to conserve” and “commercial fishing”. This initial level of coding remained flexible as respondents provided answers I had not considered. For example, mentioning diseases as a major threat to sea turtles. Later codes used tried to capture more general categories such as “helpful consumption” or “harmful consumption” were applied. After that, themes and patterns emerged, alongside other levels of coding to contextualize the case. The final coding run through included the following codes: anthropogenic, standards for conservationists, caring, consumer power, culture (of consumption), education, general attitude (towards NA consumers), hope, othering, problem worsening, sustainable seafood, and technology.

Limitations to Project Design and Methods

Unfortunately, the time period that I allotted for voluntary survey completion largely overlapped with most sea turtle nesting and hatching seasons. These seasons represent important time in the field for many potential participants, and meant that they were likely very busy and unable to access and/or respond to my survey invitation. In hindsight, I should have accounted for this timing, to widen my potential pool of participants. Extending the survey availability to a year would have likely solicited more participation, resulting in a greater number of completed surveys. Also, it would have likely increased participation if I had facilitated survey access during the Symposium, for on-site completion.

I now realize that I could have begun to promote the project before arriving at the Symposium. My on-site and subsequent recruitment might have been more successful if I had developed greater connections with group members prior to the Symposium, and had improved access to them afterward. Because recruitment was heavily linked to the

Symposium, another downside is that anyone who did not attend was less likely to have been contacted about potential participation, or to otherwise have learned about the project.

While my observations from the Symposium informed my analysis, they are limited in nature, in that these observations are spatially and temporally-bound—they were made in a particular setting over a couple of days (mainly the 2014 Symposium venue in New Orleans). Therefore, these observations may not represent an accurate reflection of the overall and everyday consumption habits of this group or of a specific individual, particularly because of the conference setting and related activities. For example, perhaps attendees were consuming plastic bottles of water because they were most readily available at the venue, whereas at home they might be better prepared with alternatives such as self-bottled tap water. However, many members of this group do interact with each other on at least an annual basis, and at regional or national meetings, so many would be aware of typical Symposium conditions, facilities, and service provisions.

I was surprised by the lack of participation at my table during the Symposium. I had hoped to gain more insights through the graffiti board. I was interested in expressions of ideas and beliefs of the community as a whole, to help contextualize the survey responses. It became quickly apparent, however, that numerous community members appeared uncomfortable with writing on the graffiti board. This discomfort may have been due to the combination of somewhat sensitive topics (e.g. consumption in a conservation context), and the board's location in a room full of vendors selling a variety of items (e.g. sea turtle trackers, bracelets made from plastic found on the beach), and their peers and superiors. It may have also been because my station was very different from the rest. Whereas most others were selling or giving items away, I was promoting a research project and inviting opinions.

As I discussed this project and the results with others, I recognized that my survey questions contained a limitation. I had two questions (8 and 18) within the survey asking if consumption could ever be helpful to or benefit sea turtle conservation. Although I did pilot the survey, I had low response rates with 37% of respondents (n=24) not answering question 8 and 50% of respondents who did not answer question 18. I did not provide an opportunity for respondents to explain why the questions were not answered and therefore I have limited information about the resulting lack of responses.

The discourse analysis of online messaging within this community also has limitations, despite its utility for my project. For example, my positionality while reading the information may have affected my interpretation. Since I do not share specific science or conservation paradigms adhered to by sea turtle conservationists, my understanding and interpretations of community-shared images and messages may differ from theirs. Also, I could only analyze overt messages and make suggestions about potential underlying themes or patterns. I did not interview content creators, so my analysis was largely limited to my readings and interpretations of explicit statements and messages. Furthermore, my aim was to look for consumption-related content, rather than more general sea turtle conservation information. Finally, while Canada has many ties with the United States, it possesses far less influential consumer cultures and conservation cultures than its neighbour, and my nationality may have impacted my understandings and analyses.

Now that I have explained how my project was completed, what I hoped to accomplish, and why it is important research for this community, I will now provide some background information on the topics that will be discussed. My literature review contains material explaining; (a) North American consumption and its impacts on sea turtles, (b)

geographies of caring, responsibility and generosity, (c) consumers' intentions and behaviours, and (d) social marketing.

Chapter 2 - Literature Review

In order to better understand the international sea turtle conservation community (ISTCC) messaging on conservation and consumption, observed behaviours, and respondent answers that compose this project, I contextualized these data sets with respect to key suggestions from relevant literatures. In this chapter, I discuss relevant academic literature concerned with potential and existing overlaps between consumption and sea turtle conservation.

This research adds to knowledge about the intersection of conservation and consumption in the context of sea turtle conservation. While conservation and consumption are sometimes portrayed as dichotomous or working against each other, this project explores their intersection in order to consider the interconnected relationships that occur there. Honest consideration of relationships between consumption and conservation is integral to better understanding our own individual and group connections to conservation polices, practices, and goals, as conservationists, consumers, and global citizens. Expanded discussions of consumption could also be used to better identify consumption-related conservation goals or targets that could improve sea turtle conservation.

While it is important to consider the existing and potential power of consumption as a tool that can be directed towards conservation, or away from more harmful practices, it is also important to consider how conservation and consumption can interact on an individual level. Sea turtle conservationists are individuals as well as members of various groups. Since they self-identify as conservationists, they can be theorized as having a strong conservation-related identity (Clayton & Myers, 2009). This identity facet could create internal conflict when trying to navigate contemporary consumption choices. Individuals may struggle to

satisfy their consumer needs while remaining loyal to their conservationist ideals, for example. The data and discussion I present may therefore be useful for considering members of the ISTCC as both conservationists and consumers. Hopefully this analysis can inform existing discussions at various levels about how best to reconcile these identities while staying true to conservation ideals and values. A further objective is to clarify the connections between North American consumers and their actions, and threats to sea turtles. Better understanding of such connections could help to reduce negative impacts of consumption, and possibly, to improve sea turtle conservation. One literature that I turned to gain greater insights on such topics was political ecology.

Political ecology. I provided general pages detailing political ecology and key approaches to conservation in my theoretical section. Here, I add to this by highlighting several ways that political ecology ask us to think more deeply and broadly about consumption. Political ecology considers the political motivations of those making decisions in policies, and to think about how politics can influence procedures and undertakings related to the environment (Robbins, 2012). For example, Lloro-Bidart (2015) critiques California's Aquarium of the Pacific's approach to educating visitors on sustainable seafood. Critical consumption theories also promote the questioning of decisions and consumption-related behaviours made by the individual, family, groups, or communities (Brenton, 2013; Bryant & Goodman, 2004; Heyman, 2005). Both of these viewpoints ask us to look deeper than individual behaviour itself, and to search for potential motivations, and links to institutions, social trends, and greater systems. I considered in both of these literatures to inform my analysis of patterns and themes in the case study of 24 respondent surveys completed by self-identified members of the North American sea turtle conservation community (NASTCC).

North American Consumption and Impacts on Sea Turtles

Academic literature produced by members of the ISTCC contains several suggested links between North American consumption, and negative impacts on sea turtles such as an emphasis on bycatch and commercial fishing, and plastics' influence on habitat degradation (Hamann et al., 2010; Wallace et al., 2011). However, links to North American consumption are presented in a somewhat oblique fashion; articles rarely name particular geographies of problematic North American consumption. Further, they rarely discuss the greater array of consumption (i.e. consumption types other than the direct takes of turtle products) that have been convincingly linked to threats to sea turtles. The primary association with the word consumption in this literature is the direct takes of sea turtle meat, eggs, and shell. For example, I typed the terms "sea turtle conservation" and "consumption" into the Google Scholar search engine, the first 13 articles that appear discuss the human consumption of sea turtles (March 26, 2015). Of the first 50 articles that this search produced, 74% discuss direct human consumption of sea turtle products, revealing this key prime association with the direct take of sea turtle products.

The primary negative association with direct takes of meat and eggs (and also consuming loggerhead turtle shell-made products such as jewelry and decorative household items) that exists in community messaging is coupled with the community tendency of contrasting such consumption, seen as undesirable and detrimental to turtles, with 'alternatives' such as ecotourism, typically labelled as 'non consumptive' (or alternative) use of sea turtles (Farr et al., 2014; Hart et al., 2013). Scholars have pointed out that this 'non consumptive' label is problematic given that ecotourism typically involves multiple types of consumption both on- and off-site, with a suite of associated impacts, negative and positive

(Campbell et al., 2008; Meletis, 2007; Meletis & Campbell, 2007). Ecotourism used to promote and fund sea turtle conservation is an example of consuming to conserve (Braverman, 2012).

Two notable exceptions in literature that offer more direct links between North American consumption and harm to sea turtles are; 1) the attention paid to the impacts related to seafood consumption, and 2) acknowledgement of large amounts of plastics in the oceans. Both seafood consumption and the consumption of plastics (including incorrect disposal) are well understood as threats to sea turtles, and studied as such.

Seafood. Literature on fishing and seafood-harvesting and the impacts of these industries, both large and small scale, contains compelling evidence that some fishing practices harm sea turtles through bycatch,[3] the generation of fishing-related marine debris, and fishing-related contributions to environmental degradation and habitat loss (Panagopoulou et al., 2017, Benhardouze et al., 2012; Read et al., 2006). The shrimping industry, and particularly bottom trawling can result in high sea turtle bycatch levels (causing turtles to be hurt and/or die), and cause habitat destruction via of the ocean floor (Abdulqader & Miller, 2012; Joyner & Tyler, 2000).

Plastics. Although the purchase of a plastic bottle itself does not harm a sea turtle, improper disposal of plastics can result in plastics on beaches and in the oceans, and may lead to detrimental impacts for sea turtles (Hoarau et al., 2014; SanClements, 2014). Plastics are known to entangle, kill, injure, and adversely impact sea turtles, and their abilities to feed

[3] Bycatch is the term used to describe the accidental catching and, at times, killing of an organism when fishing for another species. For example, sea turtles and sharks can be hooked (and drowned) when long-line fishing techniques are used in the tuna industry.

and nest effectively (Bugoni et al., 2001; McCauley & Bjorndal, 1999; Mrosovsky et al., 2009). Factors and impacts related to the production, transportation, sale, and use of plastic bottles should also be included, and each aspect brings potential negative impacts, and indirect threats to turtles. For example, plastics production and sales contribute to climate change, which is hypothesized to negatively impact sea turtles in various ways (Hirai et al., 2011; Ivar do Sul et al., 2011; Obbard et al., 2014). These examples are all a part of the impact shadow of plastics. There is little doubt that fishing practices, direct takes, harvesting of eggs, plastics, and other habitat degradation issues are important concerns for sea turtle conservationists as a global group (Hamann et al., 2010; Wallace et al., 2011). More attention is needed, however, to the consumption-related relationships, near and far, linked to associated negative impacts.

Questioning sustainable seafood. To be clear, authors writing specifically about bycatch or plastics in the science paradigms rarely make specific links between these threats to sea turtles and North American consumers. Social science articles on sustainable seafood labeling, on the other hand, are more likely to discuss the topic in specific relation to North American consumption. For example, Bates (2010) dives into the Monterey Bay Aquarium's program, Seafood Watch, and discusses the history of the program with ties to North American consumption. In fact, many social science articles are raising concerns about sustainable seafood labeling programs, including areas of ineffectiveness and warnings about the lowering of standards. For example, Seafood Watch (mentioned above) was originally designed for Monterey Bay Aquarium visitors. Now the program is marketed to the general public, who may not know it exists and may not correctly understand how to use the ever changing rating systems (Bates, 2010). Further, some fishing businesses with already high

standards (e.g. some Icelandic and Norwegian fisheries) are forced to pay for sustainable seafood certification labels with lower standards, in order to sell their products. Due to ocean and fisheries activism, businesses, governments, and consumers start to demand certified sustainable seafood products and therefore, even if not needed, commercial fisheries begin to comply (Konefal, 2013; Kvalvik, Noestvold, & Young, 2014).

Links (or lack of links) to consumers. Academic coverage of consumption-related threats other than seafood consumption and plastics is rare in the ISTCC. Articles that address consumption away from sea turtle nesting beaches are uncommon but do exist. Humber et al. (2014) acknowledge the lack of such work. The authors call for consideration of greater contexts, contrasting the disproportionate emphasis on direct takes of sea turtles with larger consumption-influenced phenomena (e.g. climate change) as threats. They describe that:

> …when considering current legal take it should be put in the context of the wider global threats to marine turtles, such as climate change and habitat degradation highlighted as conservation priorities by turtle researchers (Hamann et al., 2010); this study has shown that the relative impact of legal take on mortality could be less than the by-catch estimates from the Mediterranean alone (Casale, 2011) (p. 586).

The authors emphasize gaps in the knowledge of the extent of direct takes, reminding readers that numbers from artisanal fisheries and illegal takes are rarely recorded with accuracy. They also suggested that direct takes of sea turtles are decreasing, and propose that bycatch is a greater threat to sea turtle conservation (Humber et al., 2014).

One of the strongest and most complex commentaries on plastics as a threat to sea turtles, which extends critique to consumption-related behaviours, is in the conclusion of a paper by Ivar do Sul et al. (2011). These authors state that:

> The occurrence of a large proportion of plastics represented a major hazard for nesting female sea turtles. Since the municipal cleaning services do not efficiently remove fragments from the beaches (mainly developed), cleaning is, thus, not recommended as a long-term solution to minimize marine debris contamination. Other solutions, such as reducing the generation of land-based litter and the enforcement of international agreements, such as MARPOL Annex V, must be prioritized (p. 822).

While this comment does not extend to consumers who buy plastics, it does mention the need to reduce land-based plastic litter. The authors point out that relying on localized mitigation practices (e.g. beach clean-ups) is insufficient, and appeal for longer-term and more comprehensive solutions. The authors also implicate various scales of actors and institutions beyond oceans and beaches, and call for action on an international scale (e.g. via MARPOL). Their suggestion for a reduction in land-based litter stops just short of calling for reduced plastics consumption. They also connect land-based behaviour with sea-associated impacts—another unusual inclusion in the literature (Ivar do Sul et al., 2011). Most discussions of plastics do not include more general calls for reduced plastics consumption.

North Americans are seafood consumers, and many of us consume seafood products associated with serious threats to sea turtle conservation, such as bottom trawled shrimp. Therefore, while most North American communities are at great distances from sea turtles and their nesting beaches, most communities exhibit some demand for commercial fish and seafood, likely generating threats to distant sea turtles and their habitats (Government of Canada, 2013; Pramod et al., 2014). North Americans are also known to be great consumers of plastics, especially single use options, and some of these inevitably end up in the oceans,

representing threats to sea turtles (SanClements, 2014). Despite distances from sea turtles, North Americans *are* implicated in threats to them through our consumption choices as individuals and as a group. We have individual as well as shared consumption practices, preferences, and trends. North Americans have the potential to negatively impact sea turtles on a daily basis via their consumer choices.

Despite this threat, related ISTCC articles tend to stop short of attributing the problem to consumers or calling for changes to consumption patterns. Articles about bycatch as a threat to sea turtles tend to keep their recommended actions to fisheries, actors within them, or actors that regulate them; they do not extend arguments to consumers. Actors targeted as needing to make changes typically include fishers, and typically suggest gear changes to reduce sea turtle mortality (González-Carman, Machain, Albareda, Mianzan, & Campagna, 2012; Panagopoulou et al., 2017). Institutions, such as states, are called upon for greater enforcement of bycatch reduction policies, or for enacting new policies (Warden, 2011). For example, Lewison et al. (2013) summarize years of bycatch research on both small and large-scale fisheries. Their recommendations focus on working with and educating fishers to reduce bycatch; there is no mention of the consumption that is driving the industry, or related actions that consumers should undertake.

Ecotourism. Consumption is not all bad for sea turtles, however. Certain kinds of consumption are reported to be beneficial for raising funds and awareness for sea turtle conservation and are promoted to North Americans (and others). As previously mentioned, ecotourism is promoted and sold as a positive form of experiencing turtles, and typically labeled as ‘non-consumptive’, in an effort to contrast it with the direct takes, such as eating sea turtle eggs or meat (Meletis & Campbell, 2007). Proponents of ecotourism and sea turtle

tourism (wildlife tourism, or nature-based tourism) argue that when done 'right', these should be viewed as sustainable and environmentally sound ways to generate revenues from sea turtles and other endangered marine megafauna (Young, 2003). Globally, ecotourism is promoted as a form of alternative 'development' and as a replacement economy. It is often associated with conservation agencies and groups primarily funded or headquartered in countries of the Global North (e.g. WWF; SEEturtles.org). Such groups tend to reflect Western conservation-related views and beliefs (Campbell et al., 2008). As the result of the promotion of so-called 'non-consumptive' tourism (Farr et al., 2014; Hart et al., 2013) over the direct takes of sea turtle products, some communities in close proximity to sea turtle nesting beaches are now economically dependent on ecotourism. Ecotourism can, however, bring and exacerbate social and cultural changes. For example, community members may feel pressures to adopt or at least espouse conservation-related views and values regardless of whether or not they agree with them (Campbell et al., 2008). Ecotourism is promoted as a desirable form of consumption, despite the fact that it can still end up generating or contributing to negative impacts on sea turtles, environments, and peoples.

Geographies of Caring, Responsibility, and Generosity

To better understand consumption, there are several relevant bodies of literature available. Geographies of consumption and political ecology both consider space, time, and context when investigating and critiquing cultures and discourses of consumption. Most North American consumers are separated from sea turtles both spatially and temporally. For example, sea turtles live most of their life in open water, only returning to land to nest, meaning that most direct links between North America (United States and Canada) occur in southern states such as Florida and along the coasts (e.g. leatherbacks migrate off the Atlantic

side of Canada). However, as stated earlier, the consumption habits of North Americans have negative impacts on sea turtles, despite the sometimes great distances between consumers, sea turtles and their habitats.

Popke (2006) coined the term "caring at a distance" to represent geographies of caring for distant others (places; humans; non-human actors). He discussed extending care and generosity to different and distant 'others', through adopting particular everyday consumption practices. He suggested consumers call upon consumption to; (a) reflect personal values and ethics about networks of responsibility and care in the face of injustices, and (b) emphasize connections, and therefore feelings of responsibility towards particular people or issues (Popke, 2006).

Consumption-related decisions become far more complicated when considering every part of the production and consumption chain, from raw products to finished consumer goods, and its 'end of life' consumption or disposal. Popke (2006) argued that commodity chain-related scholarship demonstrates how complex ethical consumption can be when one considers "corporate strategies, and management systems of retailers and suppliers, as well as conflicting internal politics of various NGOs" (p. 509). Understanding and trying to navigate these complexities while considering personal ethics as a consumer can be easier to access and also easier to change for some, while remaining harder for others. Such activities can disadvantage the poorest consumers and producers, given their reduced purchasing power and limited consumer options. An overemphasis on the individual consumer while minimizing the idea of shared or community-level responsibility, can also distract from larger, systemic issues (Bryant & Goodman, 2004). This can be counterproductive to promoting ethical or less harmful forms of consumption.

In many cases, caring as consumption is used to foster relationships and to raise funds for a particular place or species. McEwan and Goodman (2010) were particularly interested in ethical consumption as a means of extending care to non-humans. According to them, organizations hoping to encourage caring for animals or species should try to inspire a relational mindset by focusing on collective prospects in an interconnected world, or push consumers to consider impacts in space and time. They proposed that it is key to move humans away from the focal point, and to emphasize core shared interests (McEwan & Goodman, 2010). While this idea has a distinct appeal, this re-envisioning of consumption can be more challenging when socio-economic and gender considerations and their influences on consumption and caring priorities come into play (England, 2010). For example, when making a consumption decision, a parent may be more likely to prioritize their child's needs over those associated with sea turtle conservation.

Social identities associated with professional practice or the love of something (e.g. a particular animal or place) are not the only forms of consumer identity. Cherrier (2009) defines consumer resistance as actions consumers take to make a political statement. The author isolates consumer-resistant identities as being either: (a) hero-driven from wanting to 'save' the world, or (b) project-driven, which develops out of self-reflection and the quest for autonomy. He argues that anti-consumption habits, in addition to being about social change, are also about self-expression and self-discovery. He writes:

> Studies on identity construction suggest considering consumption practices as both an expression of independent, personal and unique identities, distancing from that of others and a facilitation for connectedness, harmony with certain others and group affiliations (Cherrier, 2009, p. 189).

Both the individual and groups we belong to play roles in influencing caring and consumption. As well, both can be involved in notions of distancing or of making connections, when attempting to incite or change consumption activities.

Consumption can also be an expressly political undertaking. For example, a successful re-branding of a product category (canned tuna), can be orchestrated by interested actors, for the benefit of a species or group of animals (primarily dolphins in this case) and conservation more generally. In fact, the rebranding of more sustainably-caught tuna as 'dolphin-friendly', and therefore more desirable, has occurred relatively recently in North America (Baird & Quastel, 2011). The main threats associated with tuna fisheries as perceived by conservationists, consumers, and eventually companies were bycatch and entanglements including those experienced by sea turtles (Alfaro-Shigueto et al., 2011; Casale, 2011; James, Ottensmeyer, & Myers, 2005). Interestingly, probably due to the narrow focus conservation can take at times (Robbins, 2012), the tuna industry-related dolphin conservation efforts did not directly result in reduced threats to sea turtles.

Consumer Intentions and Behaviours

When considering the intersection of consumption and conservation, it is important to ponder how environmental identity might interact with consumer identity. One's environmental identity has its own geography (e.g. places an individual may feel more connected to; places and times an individual may be more knowledgeable). The range of a person's caring (Popke, 2006), such as caring about an environmental issue or a particular species, can be quite limited, but can increase spatially and temporally, especially if broadened through interest or involvement in internationally ranging species or issues (Clayton & Myers, 2009). For example, many sea turtle conservationists extend their care to

sea turtles—animals that are outside their direct sphere of family and friends, and beyond their everyday geographies. This connection may impact their consumer choices.

Environmentally responsible consumer behaviour is viewed as particularly difficult behaviour to maintain, as it can require time and financial commitments that may conflict with other priorities (Ebreo et al., 1999; McKenzie-Mohr & Schultz, 2014). As well, an informed environmental identity does not necessary lead to environmentally-sound consumer choices (Black & Cherrier, 2010; Heath, O'Malley, Heath, & Story, 2014). Life experiences and roles (e.g. parent; spouse) in addition to beliefs and politics, influence who we are and how we wish to be perceived—they interact with our identity and values, including aspects of our consumer identity. These can also be good predictors of our behaviours, including consumption-related practices and actions (Clayton & Myers, 2009).

Consumers care about and tend to prioritize family, health, and money when making consumption choices (Hall, 2011). As discussed in the previous section, some consumers also demonstrate concern about distant others (e.g. coffee producers; dolphins), and to try and reflect these relationships in their choices (e.g. buying fair trade coffee; supporting 'dolphin-free' tuna). However, North American consumers, environmentally-conscious or not, are also bombarded with great amounts of media and advertising trying to influence consumer choices. These, combined with consumption habits accrued over the course of a lifetime, our North American culture of convenience, and confusion over the meaning of words such as 'sustainable', are just a few factors that complicate contemporary consumption (Ebreo et al., 1999; McKenzie-Mohr & Schultz, 2014). Conflicts between our wants and needs, components of our identities, and life pressures can lead to consumption choices that do not put the environment first, despite our best intentions and affinity for sustainability, because of

an “intention-behaviour gap” (Carrington, Neville, & Whitwell, 2014; Connolly & Prothero, 2008; Dauvergne, 2010).

At times, consumers may seem ignorant, uncaring, or apathetic towards environmental or social problems that are spatially (geographically) and/or temporally distant from them. Often in marketing causes, information provision is seen as the ‘cure’ for this apparent lack of caring, and for connecting or reconnecting people with the results of their actions (McKenzie-Mohr & Schultz, 2014). However, this idea presumes that people are not already acting with some form of care. In fact, consumers are known to care about many things (Barnett, 2005; Barnett & Land, 2007). For example, a single mother may have a hard time prioritizing concern for sea turtles when struggling to reconcile diverse roles. Thus, a shared interest in sea turtle conservation may be over-ridden by more pressing consumer constraints and needs (Hall, 2011). Generally, caring may not translate directly into the desired form of purchases, and a lack of such purchases should not be interpreted as a lack of awareness or caring—there are more complex factors at play as consumers try to reconcile diverse needs and priorities.

Consumption choices can be used to nurture and express self-identity and belonging to a group (Belk, 1988). For example, adolescents may eat unhealthy foods to rebel against adult wishes or to follow what other members of their group are consuming in an effort to comply with social norms and avoid isolation (Stead, McDermott, MacKintosh & Adamson, 2011). Utilizing consumption within social structure to both present an image and to formulate judgements about others is an idea that has been around for many years.

Veblen (1899) coined the term conspicuous consumption for the idea that people use consumption to express societal placement and relative rank within social hierarchies. He

emphasizes that excessive consumption can be used to purposefully display identity and group belonging. Individuals can both create and reflect their actual or desired position in society through consumer displays of material culture and wealth (Veblen, 1899). Further, some communities or social groups expect or sanction certain forms of 'conspicuous consumption' from their members. Certain actions are encouraged to achieve and maintain acceptance into their group, while other forms of consumption are seen as incompatible with group membership (Miller, 1995). Consumption-related messaging or norms can be used to delineate acceptable or encourages behaviours with a group. For example, some neighbourhoods place restrictions on exterior colour choices and other elements of outward appearances of homes, making strong suggestions (sometimes enshrined in zoning or other forms of legal policies) about what belongs, and what does not. Many of Veblen's observations and concepts hold true today, and have provided an important foundation for more contemporary work on conservation. For example, political ecology examines how external actors can construct policies and discourse, based on their views (Robbins, 2012). Miller's (1995) book *Acknowledging Consumption* addresses calls from Veblen and others for more research into individual everyday consumption, and also greater investigations of how actors such as corporations, governments, and others influence decisions.

Social Marketing

Environmental organizations run information provision campaigns to equip the public with information. This practice is often referred to as education by these groups. The hope is that with the correct knowledge in place, people will be driven to undertake appropriate/desirable actions for the sake of the environment, or particular elements of it (Canadian Sea Turtle Network, 2014; Simon & Alagona, 2013). A foundational belief is that

if enough people knew *enough* about the impacts of their decisions, they would change their actions. However, changing how people consume, or addressing the "intention-behaviour gap", is more complex than simply using marketing techniques to sell goods (Carrington et al., 2014; Heath et al., 2014). For example, information provision campaigns may move people to switch to a different type of soap, but given they were already buying soap, relatively little behavioural change is needed. Greater challenges will likely accompany suggestions for greater shifts in behaviours (e.g. not consuming seafood anymore rather than purchasing sustainable options).

In *Social Marketing to Protect the Environment: What Works,* the authors use the Monterey Bay Aquarium's Seafood Watch program as one of their information-based campaigns for analysis (McKenzie-Mohr, Lee, Schultz & Kotler, 2012). This long-standing program is often promoted in sea turtle conservation circles as supporting marine conservation. According to the authors, this social marketing program has done many things correctly in their attempts to encourage environmentally desirable seafood consumption. The program:

1) Has multiple foci: it emphases both fishing practices of different fisheries, as well as consumer and restaurateur choices. These foci provides the potential to change the behaviour of multiple actors, at multiple levels, allowing for a maximizing of influence and reach. Having multiple inter-related targeted actors can also help to generate widespread 'social infrastructure' to support the behaviour change;

2) Uses social marketing concepts/material goods such as public contracts, and offers public recognition for contributing actors who have changed their behaviour for 'good'. Social recognition occurs through awarding plaques to restaurants who sign on. Social diffusion occurs through the restaurants hanging the plaques on their walls and featuring their certifications on websites and menus. It also occurs through the use of events and contests; and

3) It addresses issues of convenience and ease—offering a wide array of free and easily obtained sets of information for its target consumers, from wallet-ready printable cards of 'red light to green light' regional fish and seafood choices (red=bad; green=good), to a Web-based phone app (application) that keeps subscribers updated on the newest regional sustainable seafood information (Bates, 2010; SeaChoice.org, 2014).

McKenzie-Mohr et al. praise the program but suggest improvements (2012). They suggest that program managers should consider: (a) further increasing the convenience, ease of use, and reach of the program through the use of a labeling system directly on products; (b) taking the time to gather data on the reasons why some restaurants have refused to sign on; and (c) investing energy in gathering and analyzing data that highlights successes to date, by quantifying 'return on investments' of participants, volunteers, advocates, and funders (McKenzie-Mohr et al., 2012). All of these emphasize the importance of using multi-faceted approaches in trying to change consumer behaviour.

Interestingly, social marketing research indicates that environmental campaigns that employ pictures of what is deemed environmentally unfriendly behaviour (e.g. beaches filled with refuse, ocean filled with plastic) can, at times, increase related undesirable behaviours in some people (e.g. littering, consuming disposable plastics, releasing helium balloons). The explanation for this reaction is the phenomenon of social norms. Humans have a tendency to follow the behaviour that most people appear to follow. Seeing pictures of plastic on a beach, might suggest to some people that the social norm is littering and plastics consumption, and therefore, their behaviour will not make a difference or they could potentially be ostracized for behaving differently than the norm (McKenzie-Mohr et al., 2012).

Both the accolades for Seafood Watch program and the potential improvements discussed here highlight many aspects of social marketing research that could be used to

analyse current and past programs and campaigns within the ISTCC. Better understanding of community messaging successes and failures, in terms of behaviour changes achieved or not achieved, could allow for better self-evaluation, and provide necessary information to ensure future successes. Such research on the community itself is more likely to occur if the ISTCC maintains or increases efforts to welcome research occurring outside of biology and other fields of science, including research on the ISTCC itself.

Chapter 3 - International Sea Turtle Conservation Community Messaging Results

In addition to asking respondents about their consumption-related beliefs and behaviours, I was also interested in greater factors at play, and contextual influences. Along with reviewing relevant academic literature, it was important to outline current ISTCC messaging available to the average person through the Internet, and to also outline ISTCC consumption-related communication to members. This contextualization is important as it can help to illustrate similarities and contradictions between the messaging coming from this community as a whole, to others and each other, and some of the individuals that belong to it. Academic literature is not necessarily accessed by average consumers and not all respondents and member of the ISTCC are academics, so it was relevant within this project to analyse the interactions this conservation community chooses to have with general consumers from North America.

Interacting with the Larger Community's Online Presence

Table 1.1 (p. 21) lists the ISTCC websites that I regularly visited. This list is not exhaustive, as I was mainly focused on North American sites for my analysis. I did look at some government websites, however I focused on non-government organizations (NGOs) like Turtle Island Restoration Network. NGOs play important roles in sea turtle conservation and consumer-related advocacy and fundraising, contributing to a greater 'culture' and community of North American sea turtle conservation. I further pared down the list as some NGOs have different sites for their large-scale, multi-year programs. For example, "Billion Baby Turtles" is a project sponsored by SEE the Wild, and "Sea Turtle Restoration Project" is a part of Turtle Island Restoration Network. I only list the NGOs' main sites.

Promoting Sea Turtles as Worthy of Conserving

There are plenty of avenues by which consumers and conservationists are encouraged to help sea turtle conservation organizations by consuming products or services that raise revenues for sea turtle conservation. The websites I examined include many examples of how consumers are being asked to: 'come to the rescue'; 'save'; 'adopt'; be 'heroes' or 'champions'; and to help 'keep sea turtles safe'. This discourse suggests that the messaging plays on people's emotionality and 'connections' to sea turtles (real or imagined) to sell goods, services, and approved behaviours to community members and others who visit such sites. For example, the use of the term 'baby sea turtles' instead of hatchlings (SEEturtles.org, 2014) can be construed as being used to portray turtles as cute, and to anthropomorphize them, a ploy used to create closeness between consumers and causes (McEwan & Goodman, 2010). Running impromptu 'who's the cutest contests' on '#tinyturtlesTuesday' (Sea Turtle Inc., 2015) can also be seen as working to reinforce the idea of sea turtles being charismatic and adorable.

There are apparent patterns in the sea turtle images that seem to dominate this online community presence. Adult sea turtles are often shown at their most majestic, swimming through clear waters with their limbs spread out in elegant ways, epitomizing graceful gliding beauty. They are not frequently shown stumbling awkwardly on nesting beaches, or having difficulty trying to traverse logs, rocks, etc. Hatchlings are popular in the imagery presented; they are often photographed close up or in large groups on the beach, perhaps to emphasize their small size and vulnerability. Cartoon images of sea turtles are also very popular in this community and in the world generally. All of this charismatic imagery contributes to the

notion of sea turtles as charismatic and thus worthy of 'saving' (Cabrera & Williams, 2014; Cherrier, 2007; Hawkins, 2012; Krupa, 2013).

This strategy in ISTCC messaging of using discourse to victimize (e.g. be a hero, champion) and humanize (e.g. adopt, baby) sea turtles could be an effort to tap into the "carescapes" of consumers (Popke, 2006). Perhaps in the hope that consumers form a stronger bond and, therefore, take some responsibility for the plight of sea turtles. This increased feeling of responsibility can impact priorities and, potentially, have some impact on consumption choices (Hall, 2011).

Promoting Ecotourism as an Alternative and Desirable Use of Sea Turtles

Ecotourism is a now a notable part of sea turtle conservation fundraising and 'friend-raising' (Burnett, 1992). Sea turtle nesting monitoring programs around the world now host day visitors and run volunteer and other visitation programs for tourists. Ecotourism promotion linked to ISTCC typically involves inviting foreign visitors to travel to sea turtle nesting beaches abroad (e.g. in Costa Rica). Some North American conservation organizations host tourists and 'voluntourists' to participate in or witness sea turtle conservation US-based work such as beach-based monitoring and data collection as well. The Sea Turtle Conservancy (STC), a US-based NGO with an office and research station in Costa Rica, welcomes volunteers and other visitors in the US and Costa Rica, and is introducing this aspect in their Panama project as well. In Costa Rica, the NGO welcomes various types of visiting research participants and assistants to its monitoring programs in Tortuguero. The STC also operates a museum that caters to tourists as part of its Tortuguero site (Sea Turtle Conservancy [STC], 2015a).

Other organizations act as turtle tourism clearinghouses and promoters for various groups. SEEtheWild, for example, promotes and brokers conservation travel packages with vetted, approved organizations (e.g. Earthwatch Institute), and claims that 20% of revenues generated fund international wildlife conservation efforts (SEEtheWILD, 2014). SEEtheWild is also directly affiliated with SEETurtles.org; they offer "green turtle research" trips and "leatherback turtle volunteer trips" to Costa Rica (SEETurtles.org, 2014). Turtle Island Restoration Network offers volunteer opportunities to work alongside scientists tagging sea turtles and hammerhead sharks (Turtle Island Restortive Network, 2014). Animal Experience International (AEI) participates in sea turtle tours in Greece. AEI is an ecotourism broker, matching potential volunteers with interested agencies and organizations. For example, NGOs working on sea turtle conservation in Sri Lanka, Australia, and Guatemala. (Animal Expereience International [AEI], 2014). Incorporating tourists, whether as volunteers or more casual visitors, into beach patrols, hatchery management, or visits, and other 'first-hand' sea turtle conservation experiences, is seen as a way to help fund conservation and to create or strengthen bonds between visitors, sea turtles, and related conservation efforts and financing (Troëng & Rankin, 2005; C. Wilson & Tisdell, 2003).

At sea turtle rehabilitation centres, people can see the resulting impacts that threats faced by sea turtles can produce (e.g. injuries related to boat strikes and entanglements in fishing gear). These places can concretely demonstrate the negative effects that the seafood industry, some fisheries, and plastic consumption have on sea turtle fitness and mortality by exposing visitors to related sea turtle injuries and deaths. While such experiences are associated with transformative potential for changing those that engage with them, it is not

known exactly how visiting such centres impacts the individual consumption habits of those who work there or visit them.

Ecotourism is generally promoted as something helpful for sea turtle conservation, despite existing critiques of ecotourism, and the lack of evidence that ecotourism or other experiential encounters with sea turtles contribute to long-term changes in individual attitudes or related behaviours (Meletis & Campbell, 2007).

Promoting Purchasing to Help and Advertise Sea Turtle Conservation

In addition to the promotion of ecotourism as helpful consumption, consumers are also encouraged to buy a variety of material goods, typically emblazoned with turtle imagery, to help fund sea turtle conservation. For example, some sea turtle conservation NGO websites include online shops and/or brick-and-mortar stores that raise revenues for their organization and its programs. Many sea turtle conservation NGOs and facilities (e.g. rehabilitation centres) sell hats and T-shirts featuring their logos (see figure 3.1). Some sell other items such as jewelry, postcards, stuffed sea turtles, photographs, and other forms of turtle-related art. Sometimes, sea turtle NGOs cooperate with local groups or individuals on, or near, sea turtle nesting beaches. Together they produce goods that help fund sea turtle conservation, and support 'alternative' or 'ethical' livelihoods for local residents. At the Symposium, for example, attending delegates and consumers could buy

Figure 0.1 – Model wearing T-shirt from the Turtle Island Restoration Network online shop (2015).

bracelets and toys made from collected beach plastics through Ocean Sole Foundation (www.ocean-sole.com). WIDECAST, an NGO that operates throughout the Caribbean, works with women's groups in Costa Rica that make baskets, purses, bags, and other accessories from collected disposable plastic bags. This project has the dual purpose of: (a) removing bags from the environment, reducing bag-related threats to sea turtles and other animals; and (b) providing alternative livelihoods for women producing the bags (Meletis, personal communication, January 12, 2015). Other sea turtle groups and NGOs emphasize donations or sponsorships, and may offer promotional goods such as stickers, hats, and T-shirts to donors.[4]

Members of the online sea turtle conservation community are also sometimes encouraged to consume certain goods through the promotion of secondary groups or companies. For example, I came across sea turtle conservation groups' promotion of companies selling stainless steel lunch products (http://ecolunchboxes.com/fundraising/), eco-friendly clothing (http://float.org/) or jewellery (http://www.puravidabracelets.com/products/save-the-sea-turtles-pack). Many of these relationships include cross-promotion that generates donations resulting from each external purchase. While small groups engage in such tactics, some of the partnerships involve large, well-established corporate partners. For example, some sea turtle conservation organizations have relationships with company websites like Amazon.com (via Amazon Smile and Goodsearch programs). Customers can attach their purchases to particular causes and groups

[4] For example, WiLDCOAST uses methods for raising funds such as hosting events, accepting sponsorship, and asking for donations (http://www.wildcoast.net/take-action). The Canadian Sea Turtle Network website is a blog and raises funds through donation requests. They also list many supporters including known Government of Canada funding agencies and Mountain Equipment Co-op (http://www.freetheleatherback.com/donate.html).

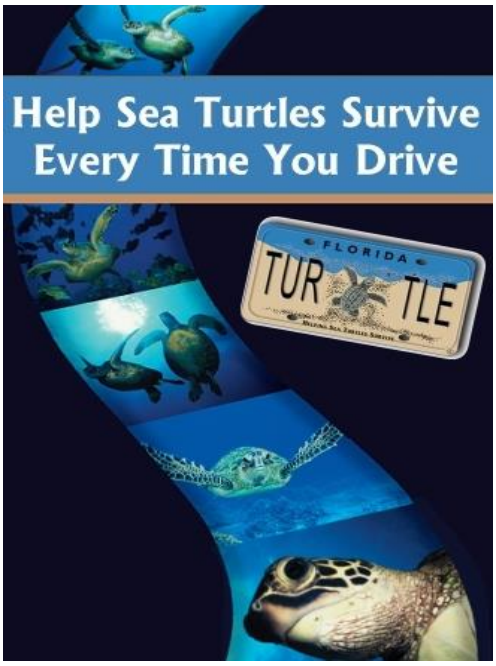


Figure 3.2 – License plate fundraising (STC, 2012).

and the companies will donate a portion of customer purchases as well as related bonuses to the selected participating sea turtle organizations (Beach, 2014; Gulf World Marine Institute, 2015). On December 20, 2015, there were 105 different sea turtle-related "eligible charitable organizations" registered with AmazonSmile (Amazon.com, 2015).

Many of these examples reveal that the ISTCC promotes what Braverman (2012) called "consuming to conserve", the act of purchasing or investing in one thing (good or service) in order to conserve something else. Figure 3.2 is an example of a funding campaign that incorporates multiple consumption behaviours. This successful campaign by Sea Turtle Conservancy (STC) offers vehicle owners an opportunity to promote and support sea turtle conservation through dedicated state car licensing in Florida. Revenues generated from "TUR TLE" plates help to fund sea turtle conservation (and mark cars as belonging to sea turtle conservation supporters), offering car owners a way to 'consume to conserve' (Braverman, 2012).

From a wider consumption or environmental perspective however, the use of car licenses to fund sea turtle conservation can be interpreted as 'green washing'[5] car use. A more holistic or conservation-oriented approach might emphasize calling upon individuals to reduce their dependency on gas-powered cars and to contribute gas savings to sea turtle

[5] A term used to describe the emphasis (at times misleading) of the environmental benefits of a product or company to consumers (Greenpeace, 2015).

conservation. This license plate campaign is successful, however, because it taps into a large North American market (people who must license their vehicles), and also perhaps because it fits well with North American consumer preferences (e.g. car use; wanting to feel better about car use; wanting to support conservation), without suggesting or requiring any major lifestyle changes. It does, however, offer consumers more indirect ways to think about their consumption, by using funds raised for sea turtle conservation-related research, with many reports and articles generated from this work being posted to the Web or otherwise easy to access (STC, 2012).

Competitive consumption-related contests or campaigns are also part of the ISTCC. Some sea turtle conservation organizations host fundraising challenges between different groups, such as schools, to see which group can raise the most funds. Sometimes, private companies host contests for sea turtle fundraising. In return, sea turtle organizations may promote these companies' services or products. All of these examples represent sites where consumption and conservation interact directly, to fundraise for or otherwise support sea turtle conservation.

Discouraging Undesirable Consumption – Direct Takes

Community messaging within the ISTCC also includes messages about types of consumption to be avoided. The direct consumption of sea turtle products (e.g. meat, shell, eggs) is frowned upon by many members of this community, and is the most obvious target of anti-consumption propaganda (The State of the World's Sea Turtles [SWOT], 2015). Community opposition to the direct consumption of sea turtles is reflected in various types of texts and material objects associated with this group. For example, many social media campaigns around the world exist to further promote the idea of such consumption as

undesirable, regardless of cultural or other contexts that may be contributing to the direct consumption (e.g. rural poverty and food insecurity).

Even legally sanctioned forms of sea turtle products are targets of scrutiny and opposition. Messaging is to avoid direct takes of all kinds, and pressures to try and shut down legal sources of turtle products always exist within the ISTCC. For example, there is an email/social media piece that continues to circulate within and outside of this community that demonizes the legal sea turtle egg harvest in Ostional, Costa Rica.[6] However, using incorrect information and misrepresented images, the email portrays the harvest as disgusting, and something that must be stopped, suggesting that local people are overharvesting, and contributing to the eventual extinction of these turtles. This campaign is factually flawed, yet contains powerful anti-direct consumption messages and problematic stereotypes and assumptions (Snopes.com, 2010). It is a good example of emotional appeals to conservation-interested audiences to oppose direct takes of sea turtles, for the sake of their conservation, facts aside.

Another typical image circulated is that of a pile of slaughtered turtles. For example, I encountered one of several sea turtle tags reportedly representing the sea turtles that were killed in Nicaragua. It was posted by the STC on Facebook on March 25, 2015. I interpreted this pile of sea turtle tags as suggestive of the contrast between great efforts at sea turtle conservation gains in Costa Rica (Nicaragua's nearest neighbour to the south), as compared with great sea turtle losses in neighbouring Nicaragua. I found this image to be particularly

[6] This one and only legal harvest of Olive Ridley eggs is supported by scientific evidence, has national legal status, is community-run, government-sanctioned, and generates local livelihoods for community members (Madrigal-Ballestero, Schlüter, & Claudia Lopez, 2013).

informative about online messaging within this community, in terms of the online comments that it generated. Many comments suggested disgust and sadness, with some people including emoticon tears alongside text. A minority of displayed comments contained links with greater issues such as the need for more honest discussions of community member involvement in threats to sea turtles, suggesting that all the blame should not lie on people 'over there'. Some commenters raised questions about their own individual roles in threats to sea turtles, such as admitting their plastic usage. Others commented on the hypocrisy within the ISTCC in terms of members not finding their own consumption of fish or meat problematic, while condemning sea turtle consumption. The typical reply to this condemnation was that member meat and fish consumption is different because it typically does not involve endangered species. While being true, much has been written about the environmental impacts and the unsustainable nature of meat consumption and its growth worldwide (Crewe & Lowe, 1995; Dauvergne, 2010; Miller, 1995). The sustainability of global demand for and consumption of seafood has also been questioned (Ayer et al., 2009; Dendler, 2014; Lloro-Bidart, 2015).

The same can be said for NGO-messaging where frequently, actors most closely linked to sea turtles (e.g. fishermen) are targeted, while few connections are made to more distant consumers. For example, the Canadian Sea Turtle Network (www.freetheleatherback.com), Canada's only sea turtle conservation organization registered with Seaturtle.org (2014a), includes a campaign to work with commercial fishermen in Nova Scotia to help them decrease the amount of sea turtle bycatch in Eastern Canadian waters. These efforts, which seem to be primarily composed of encouraging positive relationship by involving fisherman in sightings, are described as successful since their sightings of leatherback sea turtles have increased from 80 (1997), to over a thousand sightings now (no

year given) (Canadian Sea Turtle Network, 2014). While its website includes ways to support the organization and get involved, it does not include mention of campaigns to educate Canadian consumers about reducing or stopping behaviours harmful to sea turtles (e.g. using less disposable plastic bags), or increasing 'sea-turtle friendly' behaviours (e.g. boycotting shrimp).

Promoting Conservation Actions to Counterbalance Consumption Habits

Consumption choices are not easy to make. When average consumers become interested in sea turtles, they might seek guidance and information about how they can support the cause and get involved, including how to best direct their consumption to help (and not hurt) sea turtles. Addressing such needs, ISTCC websites typically include a section such as 'how can you help' or 'take action' (for examples of such sections, see www.seaturtles.org and www.seaturtles911.org). While these actions are not all about consumption (what to buy or not buy), most are related to consumption (e.g. beach litter clean-ups relate to plastics consumption and disposal).

This type of messaging is easily found on Facebook and Twitter. For example, Figure 3.3 (p. 68) describes actions that could help reduce the amount of garbage and marine debris that end up in water sources, thus reducing threats to sea turtle mortality. Generally, these lists contain suggestions such as calling on people to: support sea turtle conservation through shopping in related online stores (e.g. where a portion of revenues funds conservation); make donations; and/or consider sea turtle 'adoptions'. Other actions include participating in beach

Figure 3.3 – Example of what an individual can do to help (Ocean Conservancy, 2015).

clean-ups, volunteering at nesting beaches, hatcheries, or elsewhere, reducing personal plastic consumption, recycling, not littering, not releasing helium balloons, or supporting sustainable seafood fisheries (to reduce sea turtle and other bycatch).

One of the most prominent marine conservation NGOs in the world, the Ocean Conservancy, hosts an international coastal debris clean-up initiative called "Trash Free Seas" (formerly "International Coastal Clean-Up"). This campaign is just one example of many clean-up initiatives. In 2015, the most-counted garbage items picked up on shore lines were cigarette filters. Five of the top 10 items collected are typically made of plastic (e.g. plastic bags, lids, bottles). Other commonly found items include straws, stirrers, and food wrappers, and many of these are likely plastic or contain plastic. (Ocean Conservancy, 2011). Typically, public education information or campaigns directed at consumers encourage or discourage the consumption of particular items, in the hopes of reducing threats to sea turtles and bolstering sea turtle conservation efforts (e.g. encouraging the use of durable, reusable shopping bags over disposable plastic ones, and discouraging the consumption of unsustainably caught shrimp).

In the sea turtle conservation world, the impact-related focus in such campaigns is on acute, plastics-related threats to sea turtles. Campaigns typically call for consumers to take certain actions (e.g. switch from using disposable plastic bags to reusable canvas bags), but do little to: (a) empower individuals to make more radical consumption changes; incite

changes in collective thinking (e.g. towards greater emphasis on longer-term environmental concerns, such as banning plastic bags at the community level); or (b) emphasize or address connections between actions in disparate places, at various scales (e.g. consider plastic usage further inland, which also leads to plastic pollution within the oceans). On the other hand, some NGOs explicitly call for changes to consumption habits in North America.

'Reduction' campaigns push for re-use, and 'rejection' type anti-plastic campaigns often ask consumers to choose alternatives, such as canvas bags. These are not the exclusive domain of sea turtle conservation organizations, however. Progress on this issue has been documented worldwide, sometimes resulting in legislated changes such as the implementation of plastic bag bans, or minimal thickness requirements (Banks, 2008; He, 2012). For example, in the U.S., the Sea Turtle Restoration Project (STRP) (www.seaturtles.org) has a bag use reduction campaign in California called 'Bag the Plastics' (Sea Turtle Restoration Project [STRP], 2014). These more radical campaigns are more common in coastal areas, even though plastic consumption further inland can be harmful to sea turtles as well.

In terms of seafood-related impacts, various fishing practices, and particular gear types used within these, many changes have been made because of known direct threats to sea turtles (e.g. bottom trawling is viewed as a particularly environmentally destructive practice; Hamann et al., 2010). However, Canada continues to import seafood from all over the world, including nations where fishing practices may not be sea turtle-friendly or sustainable. In 2012, Canada exported 86,214 metric tonnes of shrimp. That same year we imported 54,679 metric tonnes of shrimp (Government of Canada, 2013). According to SeaChoice.org (2014), a Canadian watchdog for sustainable seafood practices, Canada

catches some of the most sustainable shrimp in the world (there is currently one exception: Atlantic-caught northern shrimp are yellow-listed—halfway between a desirable 'green' catch, and a particularly inadvisable 'red' catch); red is the colour used on seafood consumption classification cards to indicate products that consumers are not advised to consume (Agnew, Gutierrez, Stern-Pirlot, & Hoggarth, 2014). As of March 16, 2014, the only shrimp types generally recommended as 'sustainable' purchases are: 'wild-caught' shrimp (from British Columbia, Oregon, and California); farmed black tiger shrimp from a province in South Vietnam; and farmed pacific white shrimp from the United States (SeaChoice.org, 2014). Despite well-documented adverse impacts on sea turtles and other animals (including humans), conventionally harvested shrimp continue to be sold legally in Canada, and purchased by 'unsuspecting' customers.

Interested consumers can help sea turtles in a variety of ways according ISTCC messaging. Volunteering for beach clean-ups, switching to reusable bags and reusable water bottles, and recycling are all common suggestions for actions North American consumers can undertake to aid sea turtle conservation. To combat the problems with fishing practices and bycatch, the most common suggestion is to watch for labeling and support sustainable fisheries.

Promoting Consumption to Each Other

In addition to reviewing academic literature, and online messaging related to consumption and sea turtle conservation, I undertook observations while attending the 2014 Symposium in New Orleans, LA, USA. I made these observations to promote my project and recruit potential participants, but also to gain a better understanding of the ISTCC via observing members of the ISTS. Everyone who attends the Symposium is a member of the

ISTS (via conference registration or otherwise). While attending the Symposium, I experienced and observed consumption-related messaging in the form of texts and visuals. Such messaging was on display in various venues—from presentations, to the auction items for sale, to vendor booth consumer products, and messages in the video night films.

I saw many examples of apparent sea turtle conservationist identity-linked conspicuous consumption (Veblen, 1899). Many participants wore sea turtle flair such as T-shirts, hats, and jewellery, including many items that emphasized professional and personal links to turtles (e.g. SEA TURTLE HOSPITAL jackets; named turtle project baseball hats and shirts). The Symposium sells commemorative T-shirts with turtles on them, and in 2014, the attendee package included a turtle-themed notebook and plastic Mardi Gras beads, which is a bold choice when you consider the negative impact plastics have on sea turtles and the close proximity of New Orleans to water. Figure 3.4 contains some of the sea turtle themed gifts I have received since starting this project. I have definiately observed that friends and family in my circle, regardless of their affiliation and beliefs about sea turtle conservation, appear to assume that my interest in sea turtles through this project is reason enough to buy or make me trutle themed paraphernalia.

Figure 0.4 – Sea turtle items I have received since starting my project including in my Symposium gift bag. The stuffed sea turtle and reusable bag come from the gift shop at Sea Turtle, Inc. in Texas (Photo credit: Cherise Chrispen, 2015).

Two important social and fundraising events at the Symposium are the annual Silent and Live Auctions, held to fundraise for student travel grants for

subsequent symposia. The culture of the Auction involves 'paying it forward'—older, more seasoned, and better-salaried participants, especially those who have benefitted from Symposium student funding in the past, are encouraged to spend generously, to perpetuate subsidized student Symposium attendance. Symposium attendees and others donate most of the items for both a smaller Silent Auction, and the Live Auction, and these are sold through attendees outbidding each other. Being involved in bidding at both auctions seems to be an important part of the community culture as well. Friends and colleagues often place initial bids, and purposely outbid each other to raise the winning bids and generate more revenue for student grants. People socialize in a fluid way in the Silent Auction room, and the Live Auction is one of the main integrated Symposium social events.

During my one-on-one conversations with individuals during this time, I noticed a primary association Symposium attendees made between the word 'consumption' and the direct take of sea turtles. When discussing my project topic—consumption within sea turtle conservation or consumption habits of North Americans within sea turtle conservation—most assumed I was looking at the direct take and direct consumption of sea turtles and their products (e.g. eating sea turtle meat and eggs, using the shells to make products). I often had to provide examples of consumption-related fundraising encouragements and discouragements to illustrate my project to potential respondents.

My Symposium observations reveal important findings for this case; (a) forms of "conspicuous consumption" are demonstrated by this group (Veblen, 1899), (b) consumption (especially of sea turtle flair) is encouraged and enjoyed within the multi-day event as a form of fundraising to support conservation, and (c) the definition of consumption for this community is associated with the perceived negative action of direct takes of sea turtles.

Both the academic literature and ISTCC community messaging reviews demonstrate that there are many intersections between conservation and consumption from the various roles and locations within society an individual can inhabit (Gibson, Ostrom, & Ahn, 2000). Consumption as an activity type allows people to:

> (1) take action to benefit or support specific causes, industries, businesses, and organizations that impact conservation in some particular way (e.g. refusing to purchase or consume 'unsustainable' shrimp; purchasing a conservation T-shirt);
>
> (2) express identity, both as an individual, or as a member of a particular group (e.g. class; political camp; cultural group). It can also be used for 'conspicuous consumption' and unnecessary displays of wealth (Veblen, 1899); but also
>
> (3) cause issues, challenges, or problems necessitating conservation (e.g. the direct taking of a species or its habitat, causing or exacerbating its endangerment).

All three of these interactions between consumption and conservation are found within sea turtle conservation.

Chapter 4 - Survey Results

In previous chapters, I have discussed conservation and consumption-related messaging in the international sea turtle conservation community (ISTCC). Community messaging occurs in: (a) research papers (e.g. arguments for reducing the bycatch of sea turtles as a fisheries imperative, and a process that consumers can contribute to); (b) online activity (e.g. pages and organizations that invite consumers 'save' a sea turtle by purchasing a necklace); and (c) at the ISTS's Symposium (e.g. members are encouraged to express their identity as sea turtle conservationists, and contribute to sea turtle conservation funding, through purchases of turtle-themed items at auctions). This chapter is about the micro or individual level: the respondent survey results of this Masters project. I present responses collected via 24 online surveys completed by North American sea turtle conservationists (July-October 2014). I address the second research question 'what are the stated consumption-related beliefs and behaviours of sea turtle conservationists?' by discussing my analysis of themes arising in the survey responses.

Demographic Results

Thirty respondents started the survey, but only 24 completed it. This split resulted in the collection of up to 30 responses for the first demographic questions, such as describing one's role and affiliation within sea turtle conservation, and how one got involved with sea turtles. There were, however, only 24 responses received for the additional demographic information such as gender, average income, and nationality (see Table 4.1 on p. 75). As to not mislead or confuse percentages, or to confuse the analysis, I chose to proceed with only presenting the 24 complete surveys as the data set for this project.

Table 4.1 Survey respondent demographics

Survey Respndent Demographics		
Demographic Information	**Percent (%)**	**Response**
Country of belonging	67	United States
(n=24)	17	no response
	13	Canada
	4	Mexico
Proximity to ocean	71	coastal
(n=24)	29	non-coastal
Gender	83	Female
(n=24)	17	Male
Age category	33	19-29
(n=24)	29	30-39
	25	40-49
	8	50-59
	4	no response
Average household income	38	under $25,000
(n=24)	25	$25,000 - 49,999
	13	$50,000 - 74,999
	4	$75,000 - 99,999
	13	$100,000 - 149,999
	4	$150,000 - 199,999
	4	over $200,000
Occupation	33	student
(n=24)	21	director
	13	reseacher
	8	volunteer
	8	administrator
	4	conservationist
Affiliation	33	NGO
(n=24)	33	school
	17	government
	17	other
Number of years involved in	30	≤ 5 years
sea turtle conservation	27	6 - 10 years
(n=24)	13	11 - 15 years
	30	> 15 years

The demographic groups that are most prominent among the respondents are individuals who identify as women, live close to the ocean, and consider themselves from the United States. The rest of the demographic categories have a more even distribution between the available groupings. However, when considering more than one grouping within each demographic category, most respondents make less than $50,000, consider their role within sea turtle conservation to be either a student or director, work or associate themselves with an NGO or school, and have been involved in sea turtle conservation for 10 years or less.

Consumption-Related Patterns of Concern: Fishing and Plastics

When asked openly about the greatest threats to sea turtles today (question number 5), 98% of respondent answers were about anthropogenic risks (e.g. bycatch generated by the seafood industry; beach degradation). Three major categories of responses for this question can be classified as: 1) fishing, 2) habitat degradation, and 3) a 'miscellaneous' category that includes climate change.

The threat most frequently mentioned and most discussed by respondents was fishing (legal and illegal) and its impacts on sea turtle populations (e.g. via turtles as bycatch). This topic includes accidental takes of sea turtles, which was sometimes discussed alongside purposeful direct takes:

> *Knowing that the world's fisheries experience massive amounts of bycatch (most of it going unreported), I can only imagine that vast amounts of sea turtles are caught in nets and drown or are slaughtered once they are brought onto the boat. I read about and observe this issue the most through different venues and it seems to be the most obvious threat that we can easily see (opposed to long-term habitat degradation, ocean acidification, etc.)* (R6)

> *The near extinction of several populations/species was brought about by direct take and turtle fisheries; however, this has largely been mitigated. Turtle numbers were brought to low enough numbers that now fishery interactions on local and commercial levels prevent their rebound.* (R12)

Question five of the survey asked respondents to discuss the current top three threats to sea turtles. As each respondent could have up to three answers for this question only the total number of responses was 63. Thirty-five or 56% of the different responses (n=63) forwarded by the 24 respondents include mentions of sea turtle harvesting and/or bycatch (i.e. they emphasize the direct mortality of sea turtles).

To help illustrate how prevalent fishing and seafood was in these surveys, I did a word count utilizing all the responses within each survey (n=24), the term bycatch is mentioned 36 times, seafood 66 times, fishing 45 times, fishery/fisheries 86 times, shrimping/shrimp 105 times, and many other words related to the seafood industry appear in respondent surveys. This repetition reflects respondent knowledge of fishing practices and gears known to represent threats to sea turtles, as well as establish relationships between sea turtles and particular fisheries (e.g. certain fish species; shrimp). Reference to sea turtle poaching occurred 43 times, harvest/harvesting was mentioned 38 times, and other common direct take terminology was also discussed thoroughly by many survey respondents:

> *Legal hunting is still common and poaching of turtles and/or eggs still regularly occurs throughout the world.* (R1)

> *In my experience, unregulated or illegal harvest quickly overexploits a population, well beyond to what the natural capacity of that population is able to restore. For sea turtles, the breeding and large juvenile segments of the populations are particularly sensitive, so the population can collapse very rapidly.* (R19)

Respondent answers also reflect knowledge that particular fishing practices can lead to or contribute to more general habitat degradation. Some practices such as bottom trawling are mentioned as being associated with habitat destruction. Other specific problems that represent particular challenges for the conservation of sea turtles (e.g. the loss of fishing gear

which can result in sea turtle entanglements, injuries, and mortality) are present as well. According to respondents:

> *Commercial fishing not only directly kills so many sea turtles every year, but also has such a devastating impact on the oceans in general, leading to many more indirect turtle deaths.* (R21)

This response reflects commonly held concerns within this sample of respondents about both fishing impacts and habitat destruction.

Habitat degradation is specifically mentioned by 37% of the respondents (n=63); they mention issues such as the following:

> *I think marine debris is a huge problem because it kills many turtles that ingest debris that has been mistaken for food.* (R13)

> *Accidental ingestion, entanglement, oil spills, bioaccumulation in prey. The other two are being addressed and have press associated with them, but pollution/trash in a non-point source problem and hasn't been as public yet.* (R20)

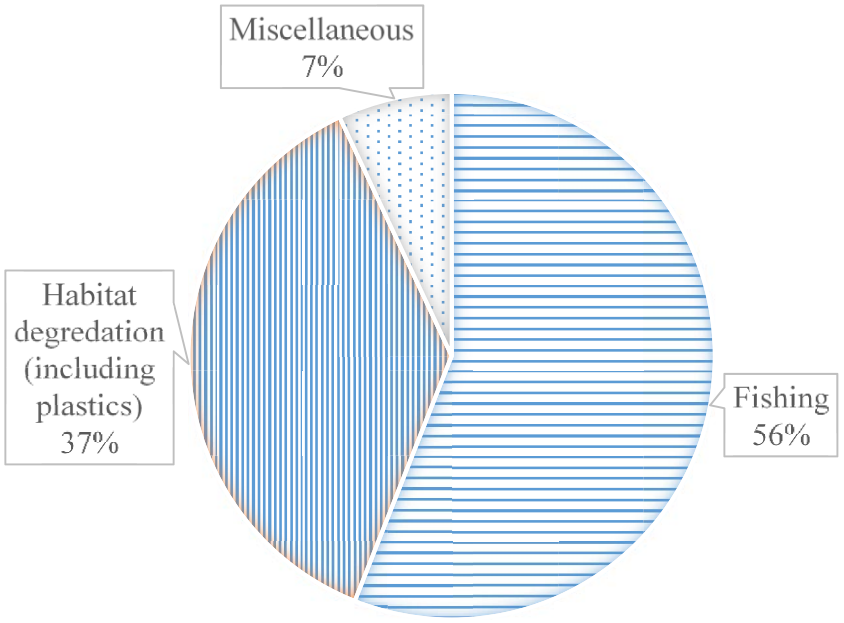
> *People do not care if the turtles need beaches for nesting, they want resorts and to make money.* (R5)

Respondents offered a wide range of ideas about habitat destruction, including effects linked to pollution, plastics, and beach development (e.g. buildings, lighting). Plastics are another clear respondent concern represented in their survey answers. The word plastic/plastics was the most repeated word in respondent surveys (mentioned 346 times!). The survey included specific questions about plastics, which partly explains the prevalence in responses. Typically, however, respondents introduced comments about plastics *before* they were specifically asked about them.

I also noted a 'miscellaneous' group of responses generated for question five which discussed the greatest threats to sea turtle conservation (7% of total responses) that addressed climate change or sea turtle health (e.g. diseases). Responses also referred to a problematic

lack of knowledge by those living closest to nesting sea turtle populations, and general comments about 'human impacts'.

Figure 4.1 - Question 5: In your opinion, what are the three greatest threats to sea turtle conservation today?



As Figure 4.1 illustrates, these respondents consider fishing and fishing practices used in direct takes and harvesting seafood for consumption to be the most damaging currently to sea turtle health. However, interestingly enough the most common word used throughout their responses is plastics. As with literature and community messaging from the international sea turtle conservation community (ISTCC), these respondents have serious concerns about the dangers fishing and plastics have on sea turtle health. Unfortunately, the consumption of seafood and plastics are common within the consumption trends of North Americans.

Searching for Consumption That 'Helps' Sea Turtles

I was curious as to whether common community practices and related messaging about 'consuming to conserve' from within the community would be reflected in respondent answers. Question 8 of the survey asked respondents about the possibility of consumption being helpful, fifteen or 63% of respondents answered the question (n=24), with six or 25% of responses stated that consumption is not beneficial. The following response is representative of the type of statement made in such answers: "*No, I don't think consumption has any benefit to sea turtle conservation"* (R13). Interestingly, of the nine or 38% of respondents (n=24) that stated consumption could be helpful, none specifically mentioned the concept of 'consuming to conserve'. Rather, the emphasis was placed on reducing or altering one's consumption in order to reduce threats to sea turtles:

> *Buying boxed cases of beer rather than six-packs with plastic rings! That's all I could think of, and I was kind of joking, but now that I look at it, it's not that dumb...* (R11)

> *Avoiding consumption all together is likely not feasible for most people. But we can help sea turtles and the planet in general by consuming more local organic and sustainable products.* (R24)

A few respondents spoke of legal (and beneficial) sea turtle egg harvests. The only one specifically mentioned is in Ostional, Costa Rica:

> *Legal, early nesting season harvest of eggs from high-density nesting beaches (where the first clutches have a high probability of being dug up when the next nests are laid). Here, consumption likely reduces bacterial loads on the beach (due to broken eggs), while discouraging poaching (although it needs to be done in such a way or at an appropriate scale so as not to encourage poaching elsewhere).* (R4)

> *Yes. The consumption of sea turtle eggs in Ostional, Costa Rica.* (R7)

Only one or 8% of respondents (n=24) mentioned the purchase of items from sea turtle conservation groups or ecotourism as being helpful to sea turtle conservation. However, respondents also stated that consumption is 'not really' helpful:

> *Not really. Unless it's buying something for a conservation group or donating money or resources that directly helps conservation on the ground by providing supplies, salary etc. Sometimes tourism/ education programs may fit into this category. e.g., turtle camps for kids in places where adults/ eggs are collected.* (R17)

Survey question 18 asked respondents about the potential for North American consumption to be helpful for sea turtle conservation. Twelve or 50% of respondents answered this question (n=24). Seven or 29% of respondents discussed consumption as being helpful or beneficial to sea turtle conservation, with three or 13% of respondents mentioned specific examples of "consume to conserve" that can support sea turtle conservation:

> *The "Lights Out for Sea Turtles" stickers being sold to promote turning out lighting on beaches.* (R16)

> *Yes, the sea turtle license plate is definitely a good thing. Education programs, camps etc., turtle tours can be helpful as well.* (R17)

Respondents included mentions of ecotourism and sea turtle conservation fundraising items as possible sources of contributions. Comments about altering North American consumption habits to benefit sea turtle conservation were mentioned by four or 17% of respondents:

> *Shopping local organic and sustainable home. (R23)*

> *Consumption of sustainable seafood supporting sustainable fisheries practices. (R12)*

Habits presented as beneficial included shopping in ways that are often deemed more environmentally-friendly, switching to sustainable seafood, and reducing the consumption of plastics.

In general, respondents did not provide many examples of consumption that can be considered helpful for sea turtle conservation. In questions 18 and 8, the majority of respondents either chose not to answer or did not think consumption could provide a benefit to sea turtle conservation. This finding is contradictory to the finding within ISTCC messaging which demonstrates the promotion of consumption through the selling of products and vacations to raise money, awareness, and caring for sea turtles to others and amongst themselves. Although as mentioned in project limitations in Chapter 1, there was no follow up nor opportunity to respondents to explain why they did not answer the question. The word consumption has a negative primary association for this group, which may explain some of the high rate of not answering, however, that cannot be backed up by the data at this time.

Changing North American Consumption Habits: Education as Solution

Respondents made clear suggestions about consumption changes and related actions that should be taken by North American consumers to benefit sea turtles (questions 6). Many respondents suggested: cleaning beaches; using recyclable or cloth bags rather than disposable plastic ones; recycling; and reducing and reusing when possible. When discussing seafood consumption (question 10), buying only 'sustainably caught' seafood was mentioned by ten or 42% of respondents (n=24). These respondents also mentioned successful programs such as Monterey Bay Aquarium's Seafood Watch consumer awareness program (see: http://www.seafoodwatch.org).

Many respondents also suggested that if consumers realized how their actions were impacting sea turtles and the environment as a whole, then they would be more likely to alter

their actions and embrace sea turtle-friendly consumption habits. For example, a respondent suggested the following:

> *I think education is extremely important. I think most people are unaware of what they can do in their everyday lives to make a difference. I also believe that a lot of people are unaware that there is even a problem or how serious it really is. I think through educating the public about threats and what they can do to help would greatly help with the effectiveness of conservation efforts.* (R13)
>
> *Lack of education. They are not aware of the effects that the plastics will have beyond their personal use and are released from their responsibility. (R10)*
>
> *We can change the world through education. The next generation will do better than us. (R23)*

These quotes reflect an idea shared by other respondents. Sixty-three percent or 15 respondents (n=24) spoke of 'education' or being aware of 'cause-and-effect' as being important to sea turtle conservation somewhere within their responses, some mention this idea on more than one occasion. Interestingly and on a related note, when asked specifically why North Americans are not changing their consumption habits in order to decrease threats to sea turtles (question 9), 72% or 17 of respondents stated ignorance or a lack of understanding (or information) as a key reason.

This group of respondents strongly spoke to the fact that they believe consumers' lack of understanding is the main reason undesirable consumption choices are made. One respondent wrote:

> *A majority of people aren't educated on the situation, and don't know that what they're doing is harmful. It's also hard to change the mind of people who are set in their ways. (R6)*

Logically, perhaps, to overcome that ignorance and save sea turtles, education (or knowledge of cause and effect) should result in a change to their consumption habits.

Consumer Power

Consumers are often told that we have power to change the world through their purchases (or lack thereof). I was interested to see how respondents would discuss the concept of consumer power. To investigate, I used open-ended questions to see if related ideas would emerge. Respondents exhibited a variety of stated opinions on such topics. Despite an absence of questions explicitly about consumer power, ten or 42% of respondents discussed this idea at some point within the survey. Some also stated that changes need to occur on a larger scale than just individual consumers. One respondent wrote the following, suggesting the corporate world as one of the domains where greater changes must occur:

> *The money and power of the corporate world. Sadly, they have some of the greatest influences on politicians, advertisers, and thus consumers. Corporations do not want to experience a decrease in profit and plastics is an easy way to make a profit. The solution is not an easy one.* (R23)

Other respondents pointed out the limitations for change at the individual level, given the few alternatives that consumers sometimes have:

> *The lack of convenient alternatives available in the marketplace. Companies mass market plastic to us and there are few alternatives.* (R7)

> *Ease of consumption. Plastic is EVERYWHERE. Even for those who try, it's almost impossible to escape.* (R16)

> *I prefer to focus on the choices given to consumers, rather than their practices. If there were more non-plastic options and more easily accessible recycling to everyone, our problems would be reduced. (R7)*

These examples speak to how difficult it can be for individual North American consumers to make changes to their own behaviour, in the absence of an obvious and wide array of helpful or available options. Even if one wanted to flex their consumer muscle through boycotting certain products, it is not easy to do.

Despite this difficulty, there were respondents that stated the individual should be held responsible, especially when it comes to seafood choices. One respondent provided this answer:

> *Knowing how your food is caught can go a long way toward understanding conservation issues, and money talks - the more people who chose sustainable options; the more the industry is likely to embrace better practices.* (R4)

Some respondents combined these ideas and stated that both individuals and our greater society have roles to play:

> *I think that we need to continue to educate the public about what they can do in their everyday lives to promote conservation and ban plastic bags from stores.* (R13)

A common example forwarded as how society can push people to make consumption-related changes was the idea of a plastic bag ban—legislation forcing individuals and businesses to make a consumption-related cultural shift.

Generally, these respondents did not speak to the average consumer having the power to save sea turtles (alone). When consumer power was discussed it was more about the lack of power and how society needs to change more than the individual. This finding may be tied to the previous section that many respondents found consumers to be ignorant and requiring knowledge of the effects of their actions, or education, prior to making consumption changes.

Respondents Describe Their Own Conflicted (or not) Consumption

So as not to force people to disclose their actual shrimp consumption, question 15 in the survey included a question about a hypothetical shrimp consumption scenario. Surprisingly, only 50% of survey respondents (n=24) answered that they 'would not eat the shrimp' in the hypothetical shrimp-at-a-party situation. Fascinatingly, three or 13% of respondents admitted that presented with shrimp at a party, they would eat the shrimp. This

response is a brave and honest admission given that shrimp are a controversial food product among members of the ISTCC because of the known undesirable impacts that certain common shrimping-associated practices (especially in terms of large scale, commercial operations) can have on sea turtles and their greater environments (Joyner & Tyler, 2000). Further, no respondents wrote specifically about ensuring that the shrimp served were sustainably-sourced before consuming them. One respondent wrote:

> *I would probably still eat the shrimp, because I grew up loving and eating shrimp, but I would also feel guilty (as usual) and still use it as an opportunity to educate.* (R16)

This individual stated that eating shrimp was a part of her life, so it would be difficult for her to stop. Another respondent wrote:

> *Oh dear, I would just eat as much shrimp as I possibly could. I KNOW this is the wrong answer!* (R11)

This quote clearly lays out a brave admission of behaviour not matching common knowledge in the ISTCC and infers guilt attributed with the action. As well, an additional 8% of respondents to the "shrimp party" question talked about being at sea turtle conservation functions where shrimp had been served.

There are other examples of where knowledge does not match action admissions in respondent answers. Respondents were asked through question 19 about knowledge of local restaurants offering sustainable seafood options in their home communities—eight or 33% of respondents were not sure of the offerings in their midst, but did not elaborate on this lack of awareness. When the survey asked for general additional comments (question 22), one respondent wrote:

> *I think it is more important what you do every day than what you do rarely. I would not be pleased but I am not going to feel guilty for throwing out a plastic bag full of cat poop at my boyfriend's place.* (R1)

This quote is an excellent representation of well-informed conservationists making consumption decisions based on particular priorities in a given moment, despite their well-established knowledge about why such an action is considered undesirable. This prioritizing can lead to confliction, such as the previous examples about eating shrimp at the party, or not when convenience or some other justification makes sense in that moment.

Respondents Question Sustainable Fisheries

In Chapter 3, research about the critiquing of sustainable fisheries and labeling organizations was outlined. In contrast, within Chapter 4, I discussed the tendency within ISTCC messaging to call for consumers (and conservationists) to support sustainable fisheries, rather than call for more drastic measures such as asking consumers to boycott seafood altogether, or call for bans related to the seafood industry. Aligning with some of the research on labeling and sustainable fisheries, a few survey respondents did speak to more radical calls for action with respect to fisheries. They also cast doubt on generally supported efforts such as certification programs for sustainable seafood:

> *Many fisheries (even dolphin safe, other 'certifications') still are catching lots of turtles.* (R17)

> *Commercial fishing not only directly kills so many sea turtles every year, but also has such a devastating impact on the oceans in general, leading to many more indirect turtle deaths.* (R21)

In addition to not supporting the idea of sustainable fisheries, one respondent acknowledged that while vegetarianism would be among the best lifestyle choices for minimizing impacts on sea turtles, it is hard to convince North Americans to give up meat or seafood:

> *There are no sustainable fisheries in the world. Better to be a vegetarian, but that is a tough sell.* (R1)

All three of these responses illustrate an uncomfortable association that sea turtle conservationists can have with commercial or other fishing and seafood industries, the labelling programs that are supposed to help protect sea turtles, and their conservationist identities. As a larger community there appears to be support for these programs and campaigns in an effort to reduce bycatch and find sea turtle friendly ways to continue the seafood industry, however, as individuals, some of these respondents are not convinced that these programs are working.

North American Consumption impacts Greater Environmental Issues

The final respondent quote in the previous section spoke to vegetarianism being a 'hard sell', and is one example of respondents providing an insight as to what some think of consumption and lifestyles within North America more generally. While most responses were narrower in scope, and focus on sea turtles and their wellbeing and/or specific threats to turtles. These answers illustrate some of the other environmental and human health concerns tied to North American consumption captured in the survey:

> *Our behaviors are directly related to the health of the ocean and therefore directly related to the health of us as humans. If one really and truly loves the ocean, they will do what is necessary on an individual level to take care of it.* (R23)

> *Waste means an extra stress on natural resources in general, in a less than intelligent, more than selfish way.* (R19)

> *Being a sentient human and watching developers destroy coastlines, seeing our fellow Americans getting sicker and fatter, watching global populations rise and food availability decline, global warming, countless sea turtle impacted by plastics, all of these impact on my choices.*[7] (R1)

[7] Please note the third quote was altered slightly to eliminate potential identifying details.

These quotes also help illustrate an observation that I made at the Symposium, many sea turtle conservationists have a wider conservation concerns (and identity) than just for sea turtles. This sample and community are made of individuals, who care not only about sea turtles, but also about the environment as a whole (including other humans). Reading the word choices (e.g. if-then statement, less than intelligent, being a sentient human) within these quotes could be interpreted as exasperation with North American consumption practices.

As a reminder, when respondents commented on barriers to sea turtle friendly consumption behaviour, 72% of respondents described North Americans as being ignorant (lacking knowledge) to the struggle of sea turtles. Other, less frequent, descriptions of North American consumers from respondents include uncaring, apathetic, and as the individual in the second quote points out, selfish. The following quote expresses, perhaps, a sense of powerlessness with trying to work with the average North American, along with a tinge of anger:

> *When you tell people they can't do something (whether it's use plastic bags, drive without a seatbelt on, carry their infant on their lap in their car), there is resistance, and it took legislation to make all these things outlawed (mostly). (R17)*

As outlined in Chapter 2, attempting to change consumption behaviour is incredibly difficult. This difficulty, of course, can lead to frustration and anger at times for those who are trying to make a difference.

Sea turtle conservationists probably have a strong environmental and conservation identity (Clayton & Myers, 2009). This sample also has a great deal of knowledge and direct experience related to the dangers that sea turtles experience. Watching and observing the harmful impacts of the everyday consumption habits and choices of North Americans on the

environment (e.g. smoking, plastic bottles, releasing helium balloons, rows of frozen shrimp for Thailand at the store), I would think, would be exasperating at least some of the time.

Chapter 5 – Discussion

In this chapter, I bring the components of this case study together. I take the findings from the survey and contextualize them within the literature, community messaging, and my Symposium observations. This integration of the literature, data, and findings is broken down into four main areas: (a) respondent demographics; (b) the promotion of consumption as helping sea turtle conservation; (c) the primary association with consumption and the discomfort this community has with the direct takes of sea turtles; and (d) the logic of education and sustainable seafood campaigns as key tools to change North American consumption-related behaviour.

With respect to consumption and conservation is seems that two dominant, and sometimes contradicting consumption-related practices exist within the ISTCC:

> **1) efforts to increase awareness of direct threats to turtles, and related discouraging of certain forms of consumption (seen as undesirable)** — typically includes isolating or focusing on particular aspects of commodity chains of consumer products, or classes of products known to harm sea turtle health or fitness, (e.g. fisheries-associated bycatch; the direct catch and consumption of sea turtles and their products; and sea turtle ingestion of plastics in the ocean).
>
> **2) efforts to create awareness of and promote types of consumption seen as beneficial for conservation awareness, impact mitigation, or fundraising** (e.g. consuming and wearing turtle swag such as sea turtle conservation program T-shirts; encouraging supporters to 'adopt' sea turtles; sponsoring the satellite tagging and tracking of turtles; and issuing material gifts in return for sea turtle-related donations).

While conservation and consumption may often be portrayed as in opposition to each other, this is a false dichotomy. Groups and individuals within the ISTCC successfully draw upon consumption to fund conservation. Further, conservationist identities do not exist in a vacuum—conservationists are also consumers, and conservationists impact the health of the

world's sea turtle populations via both their conservation work *and* their consumption behaviours.

Demographics – Learning from Respondents

Given that North Americans represent a significant proportion of ISTS membership and that I was attending the Symposium in New Orleans looking for volunteers, I thought that sea turtle conservationists from the United States would be easy to recruit. However, the number of respondents that completed the survey small, and only 67% of the respondents identified as being from the United States. A likely factor reducing participation was that the survey was available at a busy and inconvenient time (sea turtle nesting season in many places, which means night shifts for many workers and volunteers). Another factor is the divisive nature and primary negative association of direct takes with the term consumption within this community. I will discuss these final two points in more detail in the section entitled Discomfort with Consumption within this chapter.

Regarding demographics, I learned that my concept of North America is different than that of some potential respondents. I had several informal conversations with a few sea turtle conservationists from Mexico at the Symposium. Some of them told me they do not consider themselves to be North American, but Central American. Such individuals declined to participate in my project because of its call for North American participants. I had not envisioned this barrier to recruitment.

In the end, 80% of respondents were female. This large proportion is not necessarily a problem in the case of consumption research, which reveals that females tend to make most of the consumption decisions for families on a day-to-day basis, and much of the marketing

is geared towards them (Hawkins, 2012; Heath et al., 2014). Additionally, marine conservation is an increasingly female field (Wiener, Manset, & Lemus, 2015).

Seventy-one percent of respondents were coastally-based. This result is most likely caused because significant portions of the sea turtle life cycle are coastal or near-coastal. For example; sea turtle reproduction, incubation and hatchling emergence, and some foraging occurs on or close to shore (Bézy et al., 2015; Garcı, Ceballos, & Adaya, 2003; Hirai et al., 2011). This means sea turtle conservation work occurs mainly in coastal areas. Further, most marine conservation centers or laboratories (governmental; NGO-run; and academic) are coastally located.

This group of 24 respondents may appear to have some potential for bias in the areas of gender and location, however, neither of these areas are alarming because of the high level of individuals involved in sea turtles from those two demographics. As some of the richness of this case study comes from the contextualizing of the respondent data into observations made of the population both on-line and at Symposia, the rest of this chapter explores that relationship.

Promoting Consumption to Help Sea Turtles

When considering how the ISTCC 'sells' some forms of consumption as beneficial for sea turtles, while cautioning against forms of consumption seen as harmful to turtles, it is important to consider the discourse used in this messaging. This discourse or vocabulary of key terms becomes apparent when searching for patterns of language used in these messages.

Sea turtle conservation organizations appear to sell items, raise awareness, and promote programs by emphasizing a few key ideas:

(1) that one individual/consumer *can* play an important role in rescuing sea turtles (e.g. be a hero, champion); and

(2) that humans and turtles *can form strong bonds* despite their obvious differences. I observed this anthromophasizing mainly through marketing related consumption and information, using tactics to make them appear more attractive, approachable, or otherwise appealing (including 'huggable').

Heroic Consumption. In their messaging, the ISTCC takes a 'hero approach' to the task of enlightening North American consumers about the plight of sea turtles. The consumer is portrayed as a hero with the power to harness their consumption for change. Consumption is seen as a political action, and the consumer is imbued with the power to make a difference (Cherrier, 2009). Many campaigns focus on creating or enhancing connections between consumers and issues, to make consumers care. More difficult, however, is to design a campaign that can ensure that certain actions or goals become part of a consumer's top priorities—the step required to truly impact consumer choices (Hall, 2011; Popke, 2006). Further, this discourse choice can have a great impact on those individuals whose love of sea turtles is part of their identity (Clayton & Myers, 2009). For example, SEETurtles.org's program, Billion Baby Turtles, uses the term "champion" to appeal to the heroic notion of helping in messaging to promote ecotourism (http://www.seeturtles.org/billion-baby-turtles).

At both Symposia I attended, there was an emphasis on the acquisition of turtle-related items (e.g. clothing and jewelry with turtles on them), and many attendees wear/use such items. These are practices by which members of the ISTCC use consumption to 'help' sea turtles and also to help fund fellow actors (NGOs; student attendees). Attendees purchase

goods from Symposium vendor booths and at the fundraising auction. Such sales perpetuate the Symposium and student travel grants, as well as funding conservation work.

Heroic consumption also involves playing into fears and threats. The ISTCC demonstrates the horrors of direct takes of sea turtles to North American consumers. Images of slaughtered turtles are used to sell ecotourism to individuals with the money and time to travel to distant beaches. Interestingly, discouraging certain types of consumption (i.e. direct takes of sea turtles) is used to encourage the promotion of heroic consumption (e.g. ecotourism, purchasing from a conservation organization's on-line store) in an effort to help "stop the slaughter" (Turtle Foundation, 2013).

Caring Consumption. Sea turtle conservation groups also promote consumption of sea turtle conservation-related goods and services to consumers by anthromorphisizing sea turtles or otherwise making them seem 'closer' to humans. For example, as mentioned above, SEETurtles.org uses "baby" and Seaturtle.org uses the term "adopt" (http://seaturtle.org/tracking/adopt). The beauty and charismatic appeal of sea turtles is also used to promote the consumption of sea turtle tourism, with tourism sold as a way to get closer to turtles, to experience them more intimately, and to fund their conservation. For example, Sea Turtle Conservancy (STC) offers a "Sea Turtle Experience" where "eco-volunteer adventures" can be purchased (https://conserveturtles.org/get-involved-sea-turtle-experience). Marketing efforts often call upon people to demonstrate how much they 'care' for turtles by buying the right things or donating to the right organizations. In return, the implication is that they become involved in a closer, parent-like relationship with sea turtles. This close connection could potentially impact consumer choices based on the literature concerning priorities and consumption decisions (Cherrier, 2007; Hawkins, 2012; Heath et

al., 2014). However, the literature on the gap between intention and behaviour suggests that such an impact would likely be limited, without additional accompanying efforts (Carrington et al., 2014; Dowd & Burke, 2013).

My interactions with and observations of sea turtle conservationists through social media reinforced the notion of people caring for sea turtles and enjoying being close to them. For example, many such individuals post pictures of themselves hugging sea turtles, and these photographs are often taken during research or other conservation activities. Some sea turtle conservationists also willingly label themselves as 'turtle geeks' or 'turtle huggers'. In fact, T-shirts with slogans such as 'turtle girls rule' and 'turtle geek' are often sold within this community for fundraising purposes, representing an element of material or consumer culture used to reinforce turtle-human relationships as part of identity (Z. Meletis, personal communication, January 27, 2014). All of these demonstrations of sea turtle love are examples of "conspicuous consumption" (Veblen, 1899) and people wanting to reinforce their conservation identities and closeness with turtles in various ways (Clayton & Myers, 2009). Such identity building and strengthening of the human-sea turtle bond (or expanding the geographies of caring, responsibility and generosity) are generally required to potentially impact consumption choices (McEwan & Goodman, 2010).

Interestingly and conversely, when respondents were asked about forms of North American consumption that help sea turtles, very few discuss the selling and purchasing of sea turtle related items. Within Chapter 4, I pointed out that only one respondent referred to "consuming to conserve" in question 8 which asked if consumption can ever be helpful to sea turtle conservation (Braverman, 2012). Later in the survey, question 18 asked if North American consumption can benefit sea turtle conservation and a similar result occurred with

only four respondents stating “consume to conserve”. Somehow the messaging (e.g. be a hero by participating in ecotourism) and behaviours (e.g. auctioning off turtle T-shirts; putting plastic Mardi Gras beads in the Symposium package) of the community as a whole did not seem to come to mind with this group of respondents. The dominant ISTCC primary negative association of the term consumption with direct takes may be blinding members to more complicated and comprehensive conceptualizations of consumption, including their own.

Discomfort with Consumption - Direct Takes of Sea Turtles

Conversations about consumption among members of the ISTCC can be focused on direct takes. When discussing consumption informally, many attendees spoke about the direct takes of sea turtles (e.g. for meat, shell, and eggs). When I directed the conversation to consumption as a fundraising tool, or North American society’s use of plastics and plastics negative impact on sea turtles, Symposium attendees tended to have less to say. This community does not primarily associate the word consumption with every day actions or positive conservation fundraising practices within North America, and focuses more on the direct takes of sea turtles as primarily representing consumption. This association is further illustrated within Chapter 2, as research papers written within the ISTCC continue to refer to ecotourism as “non-consumptive” despite ample evidence of the consumption practices associated with ecotourism (Meletis & Campbell, 2007).

On the other hand, many Symposium attendees seemed somewhat reflexive about their own consumption. They apologized or stated being embarrassed about some of their own consumption decisions, such as holding a plastic water bottle or wearing turtle-themed clothing. Furthermore, I got the distinct impression that among this group, consumption,

including their own, was a sensitive topic—more sensitive than I had realized prior to my fieldwork. Therefore, meeting with attendees only once may also not have allowed enough time for them to feel comfortable sharing thoughts about their personal consumption with me.

When asked for final comments at the end of the online survey, one respondent suggested that they knew I was trying to get at controversial information within this community: "*I wish you luck. There may be softer walls to bang your head against"* (R1). The complex and potentially polarizing consumption debates within the larger ISTCC, and related literatures, may be what this respondent was hinting at. For example, one way the group characterizes itself, is with respect to pro vs. anti-consumption 'camps'—one's characterization depends on the degree to which one sees the direct takes of sea turtle products as acceptable (e.g. never; in some cases; in many cases). This extreme polarizing characterization is likely one of the key factors that contributes to consumption being viewed a sensitive topic. Also, the ISTCC is composed of a variety of members, cultures, and income levels, and is also influenced by the geopolitics of sea turtle conservation as the demographics of this project and Symposia Presidents' reports indicate (Seminoff, 2011; Tucker et al., 2013; Valverde, 2014). Such diversity can include very different cultures of consumption and consumption-related lifestyles and these may further complicate discussions of consumption.

Cultures of consumption. Another reason that debates over direct takes of sea turtles can get so heated within this community is that there is insufficient attention to cultures of consumption and the central roles that the direct takes of sea turtle products can play in non-material aspects of the lives of individuals and groups living close to sea turtles. Sea turtle

meat, for example is not just meat, it is linked to particular rituals, recipes, feasts, and ceremonies, which vary across the world (Mancini, Senko, Borquez-Reyes, Poo, Seminoff, & Koch, 2011). The consumption of sea turtle meat and other sea turtle products are an essential part of connections to culture and history in some societies. This cultural connection is tied to issues of identity and place, especially during times of social unrest (Mancini et al., 2011). Acknowledging close links between consumption and culture is difficult for some as it complicates consumption.

Given all of this information, it is unsurprising that questions about culture and sea turtles, and the future of sea turtle conservation appeared in respondent answers. For example, this respondent admitted their discomfort with and rejection of cultural arguments for continued consumption of sea turtle products:

> *No. It makes me a bit vexed when indigenous people eat endangered species because it "is their heritage". Slavery was our heritage in the US for many years, but it isn't now because we changed what was wrong. No culture can survive without adaption. (R1)*

This response is provided in spite research-based acknowledgement that ties to the consumption of sea turtles and consumers' sense of community and culture can continue to be a barrier to the halting of direct takes (Chowdhury, Izumiyama, Nazia, Muhammed, & Koike, 2014; Colding & Folke, 2001).

Interestingly, some respondents did recognize cultural connections to certain consumer goods in themselves, as well as acknowledging barriers to changing consumption patterns entwined with cultural practices. This recognition is exemplified in this quote from a respondent:

> *I would probably still eat the shrimp, because I grew up loving and eating shrimp, but I would also feel guilty (as usual) and still use it as an opportunity to educate. (R16)*

This individual suggests that they understand the harm that the conventional forms of shrimping can inflict on sea turtles, and expresses feeling of guilt. However, she also admits that her behaviour is influenced, at least partially, by positive associations during her upbringing (a culture of consumption). Both relevant research and this respondent's comment reinforce the idea that paying attention to cultural aspects of consumption and cultures of consumption as potential barriers to sea turtle conservation is a sound idea.

Defining consumption within this community. The results from this case study illustrate the fixated way in which respondents conceptualize consumption and its oppositional relationships with conservation, in theory and in practice. For example, only a small percentage of respondents chose to write about the selling of sea turtle flare or the promotion of ecotourism as forms of positive or desirable consumption despite their prevalence and associated successes within the ISTCC. This omission raises questions about how consumption is viewed within this group, including about different geographic imaginaries of consumption that may exist. A commonly held perception is that undesirable forms of consumption primarily occurs outside of North America (e.g. direct takes of turtle products abroad). Unfortunately, this focus seems to draw attention from negative forms of consumption and consumption-related impacts contributed by more distant consumers, such as North Americans. To truly reduce consumption-related impacts on sea turtles, community messaging should include greater emphasis on connections between problematic consumption in North America and known threats to sea turtle (e.g. regarding our great demand for disposable plastic products, our overconsumption of oil and gas, and related impacts on sea turtles).

Furthermore, my research suggests the ISTCC does not appear to adequately critically engage with their own *promotion or encouragement* of consumption (including that of disposable or semi-disposable goods that could end up directly threatening the lives of sea turtles, or negatively impacting them in more diffuse ways). These promotions include encouraging the buying and selling of sea turtle flare such as T-shirts and hats. These items are sold to raise funds for conservation and/or to encourage consumption from for-profit businesses who are willing to donate to sea turtle conservation. These activities are particularly problematic in North America as these purchases are encouraged *regardless of consumer need* (i.e. excess or unnecessary consumption is likely being encouraged for the sake of "helping" sea turtles, when in fact less consumption of goods might have a greater impact on habitat quality, etc.). This apparent lack of association prevents the ISTCC from adequately considering and questioning commodity chain level impacts of the products that they buy, promote, or sell (Robbins, 2012). Until this reflection is done, the true impacts of the supposedly desirable forms of consumption promoted within this community cannot be known.

The lack of more holistic, critical, and self-reflexive messaging about conservationists own consumption within this community also places conservation organizations and members of these at risk of mimicking undesirable aspects of greater North American consumer culture, and thus not leading by example. For example, not extending consumption-related arguments and campaigns to consumers/demand side considerations, while also encouraging excess or unnecessary consumption of material goods, is likely leading to continued contributions to undesirable impacts on sea turtles and their environments. Further, a lack of attention to consumption practices "at home" within the

North American sea turtle conservation community, both in terms of individual member lifestyles and consumption-related fundraising/vending practices, obscures greater geographies of consumption, conservation, and related impacts, of both individual members and the community as a whole. If this community and its members are calling for greater consumption-related awareness and changes to consumption behaviours, in the name of sea turtle conservation, it should be more aware of its own agency and impacts, and the geographies of these as well.

Questioning Campaigns to Change or Reduce Consumption

It is clear from participants' responses that they view fishing, especially commercial fishing, and the seafood industry as major threats to sea turtle protection and recovery (see Chapter 4). This result fits well with dominant messaging in scientific and advocacy literature put out by the ISTCC mentioned earlier in Chapters 2 and 3 (Hoarau et al., 2014; Humber et al., 2014; WWF, 2014).

The awareness of the dangers of fishing is illustrated through this respondent quote from Chapter 4:

> *Commercial fishing not only directly kills so many sea turtles every year, but also has such a devastating impact on the oceans in general, leading to many more indirect turtle deaths.* (R21)

However, it is interesting to contemplate, in light of this knowledge, survey answers about respondent behaviour. For example, only half of the respondents stated that they would not eat shrimp being served at a hypothetical party. This result is in direct conflict with respondent answers that clearly and repeatedly indicate fishing, and particularly shrimping, as incredibly harmful to sea turtle health and mortality, as well as detrimental to sea turtles' environments and general conservation. Further, 13% of respondents openly admitted eating

shrimp, and a smaller subset of this group suggested they had witnessed shrimp being served at parties hosted by members or groups within the larger ISTCC.

Such responses suggest that knowledge about the high potential for harm to sea turtles by the seafood industry, especially shrimping, does not prevent all sea turtle conservationists from supporting undesirable seafood industries and products. This "knowledge-intention" gap fits with critiques from the literatures on critical conservation studies and social marketing which suggest that information alone is not enough to change consumer beliefs or behaviours (Black & Cherrier, 2010; Carrington et al., 2014; Heyman, 2005). This gap raises interesting questions about the messaging practices and the consumption behaviours and explanations represented in this project. Why continue to focus on information provision as a central aspect of consumption-related community messaging if it is known as falling short of changing behaviours? Further, if as is the case in this sample of respondents, some sea turtle conservationists make personal consumption exceptions (e.g. choosing to eat 'regular' commercial shrimp), despite access to abundant and compelling information on the negative effects of such consumption behaviours, how likely is someone with little or no connection to sea turtles, or intimate knowledge of them, to make the 'right' choice?

Knowledge alone rarely results in behaviour change. The complexity of tackling such questions increases when examining respondent suggestions on how to alter North American consumption habits. Educating others on the causes and effects of their actions as a main route to induce behaviour change in North Americans was a respondent-introduced finding in survey responses. For example, one respondent stated that if the average person *knew* that a plastic product they purchased could eventually end up hurting a sea turtle, the individual might not buy it, or might at least recycle it. However, even within this group of

respondents, there are people who admit to not altering their consumption habits to better reflect sea turtle-friendly practices. In Chapter 4, discussing the "shrimp party" question, I included two quotes from respondents (p. 86) which reflect a combination of acknowledgement of the anti-shrimp community messaging associated with international sea turtle conservation, and consumer/conservation guilt that people can feel when they make decisions that conflict with their knowledge of environmental concerns (Black & Cherrier, 2010; Carrington et al., 2014; Heyman, 2005). Both of these responses are examples of the "intention-behaviour gap" and indicate that the choice to eat the shrimp was made *despite* knowing about potential related negative impacts for sea turtles and their recovery—the evidence of most commercial shrimping being detrimental for turtles was present, but was overridden by the desire to eat shrimp. Such contradictions are known to exist more generally among consumers (Black & Cherrier, 2010; Brenton, 2013; Cabrera & Williams, 2014). Therefore, it was not surprising to find them here. As previously stated, educating the public about sea turtle endangerment is helpful, but expecting education alone to produce sufficient change in behaviour is unrealistic and not supported by research (Bates, 2010; McKenzie-Mohr & Schultz, 2014). As some respondents suggest, average consumers consider an array of priorities when making purchases, and conservationists are not necessarily different in this regard (Bryant & Goodman, 2004; Heath et al., 2014). The tendency for conservation-related campaigns to focus on information provision only or above all else, and suggestions from the social marketing and consumer literature is not enough. More attention should be paid to how best to spur changes in consumer behaviour for the benefit of sea turtle conservation, over and above simply providing information.

Within the survey results, it was noted that 72% of respondents stated that ignorance or lack of understanding was the reason average North American consumers make poor consumer choices for sea turtle health. This perception of consumers and how they make consumption choices is flawed, as I have previously pointed out (Hall, 2011). However, this result is telling about this sample and their confidence in and preference for knowledge-based campaigns. I would be curious to find out how widespread this incorrect perception of consumer decision making is within the ISTCC and wonder how many decisions and policies are designed with this false perception in mind.

The reliance on educating North American consumers on the "cause and effect" of their actions is not the most effective way of generating behaviour change. Seafood and plastics are the two categories of consumer goods that inspire campaigns calling for changes in consumer behavior, including behaviours of consumers in North America.

Sustainable seafood. Although there is ample literature about the negative impacts of bycatch and many sessions on bycatch-related research and activism at the Symposia, the information provided to the average North American consumer about the negative impacts of fishing (like bycatch) is limited in proportion. I also noted that information often stopped at identifying fisheries and related practices as problematic, and did not extend to the consumer or demand. For example, as stated in Chapter 2, literature from the ISTCC science paradigms does not often link bycatch and plastics harm to sea turtles research back to consumers.

Calls for overthrowing or completely boycotting the international seafood industry are not very common among sea turtle conservationists and their associated organizations and campaigns. Rather, the focus is typically on re-directing consumption towards less destructive or more sustainable seafood sources, catches, and practices. This emphasis is

reflected in respondent answers (Chapter 4), and was clearly present in the discourse analysis of online community messaging (Chapter 3). Rather than asking community members to give up seafood, the predominant messaging is one of choosing the "right" or "better" seafood. I suspect that some of the rationale for this muted messaging stems from my last finding in Chapter 4 which points to my respondents, and other members of the ISTCC, stating their frustration with trying to change North American consumption behaviours.

As discussed in Chapter 2, research indicates that related sustainable seafood certification programs can be problematic. For example, programs can result in lower standards to satisfy industry and consumers (Konefal, 2013; Kvalvik et al., 2014). Bates (2010) has shown that programs such as Seafood Watch (Monterey Bay Aquarium: www.seafoodwatch.org) are designed for people who *already* have related knowledge and support the Aquarium's activities and ideals, rather than for general consumers. Such limitations indicate the need for messaging that is more diverse and widespread, and that makes greater demands on turtle-concerned consumers to truly move away from most seafood consumption, rather than making minor alterations to their consumption. This and additional data raise questions about whether ISTCC messaging and research asks consumers to do enough in the name of sea turtle conservation.

Plastics: Reduce, reuse and clean-up. Survey responses reflect particular discourses used in North American consumer culture. The actions that respondents demand of consumers are not particularly taxing or likely to generate great change. In Chapter 4, respondents describe altering consumption habits to help reduce plastics. For example, purchasing cardboard containers rather than plastic ones. In Chapter 3, actions recommended by NGOs that help sea turtles include recycle, clean-up beaches, and utilize reusable bags.

These are wonderful suggestions for consumers to be more environmentally friendly, but not nearly as severe or extreme as what is asked of local people who live near nesting beaches. For a community that seems to have a strong reaction to the word consumption, it is interesting that anti-consumption messaging is not overly prevalent or very radical.

This limited extension to consumers and/or their demand is also true for plastic consumption messaging in the ISTCC as well. Sea turtle conservation groups are likely to include statements on reducing, reusing, and recycling as desirable actions that can be taken to reduce the presence of plastics in the environment (e.g. bring your own bags; pack out trash on the beach; recycle your plastics). Thankfully, the messaging also sometimes includes outright anti-consumption messages related to plastics. Although, less common than recycle, they do use words like 'reject' or 'refuse'. Since I started this project in 2014, I would say that 'reject plastics' campaigns have become more common. Where I used to read about banning plastic bags, more recently, there has been a push for "Skip the Straw" campaigns, calling on North American consumers to reduce the chances of plastic straws ending up in the marine environment by forgoing their use and asking others, including restaurants, to reduce the use of straws. For example, Plastic Pollution Coalition has "The Last Straw Movement" program (http://www.plasticpollutioncoalition.org/no-straw-please), and Surfrider Pacific Rim has "Straws Suck" campaign (https://pacificrim.surfrider.org/campaigns/straws-suck). These campaigns make direct links to consumers and highlight consumer power to make positive change.

When dealing with plastic (and other refuse) littering the oceans and beaches, the ISTCC promotes beach clean-ups as harm reduction campaigns. These campaigns are interesting after reading about social marketing and attempts to change consumer behaviour

for environmental causes. Exposure to images of beaches filled with garbage, including plastics, can actually make the average consumer more likely to dispose of plastic in harmful to the environment ways. For example, the posters and pictures that NGOs release which state the amounts of plastics and cigarette butts that were collected during beach clean-up campaigns will mean that some people, especially those who do not have a strong environmentalist or conservationist identity, will actually consume more and dispose of their consumption waste in less desirable fashions because of the social norm phenomenon (McKenzie-Mohr et al., 2012). If it appears that a lot of people are using plastics and discarding them at the beach, the average consumer is more likely to follow suit.

On a different note, this idea that behaviour witnessed (or assumed in the case of litter on a beach) is behaviour that is followed, also means that the beach clean-ups themselves are extremely important for individuals who visit the beach. The cleaner the beach and the ocean appear, the more likely visitors will leave it that way (McKenzie-Mohr et al., 2012). Where the ISTCC should be careful is with the images that they post on social media. Such images should perhaps be of the desired outcome, not of the behaviour sea turtle conservationists are trying to stop (McKenzie-Mohr et al., 2012).

There is one distinct exception in ISTCC literature and messaging and in respondent answers. Responses about direct takes were most adamant, suggesting that such consumption had to stop completely, with very few suggestions of reduction or re-direction. Such consumption is largely understood as occurring outside of North America, with some exceptions in Mexico (Zavala-Norzagaray et al., 2015). This anti-consumption message is in contrast to the less-demanding suggestions about what North American consumers should do. Typical messaging calls for greater reducing, recycling, and reusing, but not outright ending

types of consumption. Scholars such as Black and Cherrier (2010), would suggest, however, that terms such as ‘rethink’, ‘refuse’, and ‘reject’ are more persuasive when asking consumers to take bolder actions, in addition to being more conservation-oriented concepts. Literature from prominent members of the ISTCC point out the negative impacts seafood and plastic consumptions has on sea turtle health (Hamann, 2010), and therefore, I would recommend that the ISTCC reflect upon their approach to North American consumers. Why not promote strong anti-consumption messaging to North American consumers? Does the ISTCC’s use of “consume to conserve” as a means to raise funds for sea turtle conservation impact the messaging that is chosen while encouraging modified consumption habits to North American consumers?

Chapter 6 - Conclusions

In this final chapter, I will summarize main themes in order to highlight key insights for the ISTCC raised within this case study. Finally, in the spirit of political ecology, I will forward suggestions on how the ISTCC might move forward its relationship with consumption, if it so chooses.

There are areas of divergence between consumption-related literatures, on-line ISTCC messaging, and the stated consumption-related beliefs and behaviours of respondents (writing both about themselves and others). These inconsistencies are where interesting conversations and discussions can be held. These areas can also inform reflection to help this community meet their goals and objectives related to improving global sea turtle conservation. This case study highlights four key themes:

1) the primarily negative association with the word consumption to do with direct takes, which seems to limit reflection about the use of consumption to help sea turtles and the impacts of that usage;

2) the lack of acknowledgement of ISTCC consumption-related activities as a community, and the success and power they acquire through these activities;

3) the mixed and, at times, inadequate messaging targeting some North American forms of consumption considered undesirable for sea turtle conservation; and

4) a problematic overconfidence in information provision (sometimes referred to as education by respondents) as a key way to generate positive behaviour changes.

Primary Negative Association with the word Consumption

Respondents and community members seemed ready and willing to discuss consumption in terms of direct takes of sea turtles, as this was clearly a powerful first association with the term consumption for members of this community. This focus on direct

takes is also found in related research and activism. When the discussion moved toward other consumers (e.g. North American) and consumer products (e.g. plastics), the conversation became more challenging for some. Conceptualizations of the diversity of consumption and potential connections to sea turtle threats and conservation seemed to be less obvious for many people I interacted with via this project. For example, my informal interactions with attendees at the Symposia in Dalaman, Turkey (April 2015) and New Orleans (April 2014), revealed a strong association between the term 'consumption' and the direct takes of sea turtles. Often, it was only after my specific prompting to widen the discussion, in person or through the survey, that members would raise issues related to consumer goods, such as plastics or seafood.

It is important to consider how this dominant primary association might be affecting, and particularly restricting or limiting consumption-related discussions and actions within the ISTCC. Political Ecologist Paul Robbins (2012) reminds us to think beyond simple word choice or word associations and to think of the power relations that inform and are informed by discourses used (and not use). He highlights the importance of searching for meanings associated with chosen messaging and information sharing. We must consider motivations of those creating the messaging or formulating policy, and think about how these might impact discussions and related outcomes. How does the witnessed primary association with direct takes in this case limit conversations and reflections about sea turtle conservation as it relates (or is perceived not to) with consumption? For example, ecotourism is promoted by the ISTCC as a way to experience and even "save" turtles, and it is also contrasted with direct consumption of turtles by being referred to as non-consumptive (Farr et al., 2014; Hart et al., 2013). This, ample evidence and critiques that suggest otherwise (e.g. see Meletis &

Campbell, 2007). The ISTCC should consider calling ecotourism consumptive more often than it does, and broadening its discussions about ecotourism's impacts (positive and negative, well beyond impacts on sea turtles alone). Doing this would allow for more critical and comprehensive community considerations of their own related roles and impacts, and how these might be contributing to both positive and negative aspects of ecotourism (e.g. consumption of airplane fuel; ecotourism development sometimes leading to increased resource usage or "development" in area). Greater engagement with such issues might allow for better community weighed of costs or negative impacts with the promoted potential gains ecotourism can offer for sea turtle conservation (e.g. new sources of funding; demand for related educational facilities).

Lack of Acknowledgment of Success and Power

Complicating consumption-related discussions further, members of the ISTCC do not readily seem to recognize or label some forms of consumption as consumption or consumptive. Notwithstanding the extent of consumption promotion and activities detailed in this project, survey respondents had difficulty expressing why or how such consumption can be beneficial to sea turtle conservation. Until they improve member understanding of the community's interactions with consumption-related activities and campaigns, there is also limited appreciation for the great success that organizations and individuals have had with respect to funding sea turtle conservation by effectively marketing to consumer wants and needs (i.e. encouraging and capitalizing on consumption).

Interestingly, the strong, primarily negative associations with the term consumption seem to overshadow the ISTCC's effective use of consumption as a conservationist fundraising tool. Most respondents and many of the people I interacted with at the Symposia

did not discuss the concept of 'consuming to conserve' (Braverman, 2012). 'Consuming to conserve' is recognized as both representing a certain market share of demand for consumer goods, and as well as a practice commonly encouraged by non-profit actors to raise funds (Brunk & Blümelhuber, 2011; Cabrera & Williams, 2014). Despite the encouragement of consumption activities within the greater ISTCC (e.g. promoting the purchase T-shirt with an image of a 'cute' sea turtle on it), respondents rarely acknowledged these actions as consumption, or as being associated with either negative or positive impacts.

Successful revenue generating conservation (and consumption) campaigns have become a central part of the relationship between sea turtle conservation and North American consumers. The ISTCC has become a marketer and seller to North American consumers. Inadequate discussions of internal consumption contributions and activities also suggest that the community remains relatively ignorant of the negative or undesirable impacts of these activities, including potential impacts on sea turtle conservation. The literature on geographies of consumption warns of the impact shadows associated with the generation, selling, transport, consumption, and disposal of products that can have more extensive reach than one might imagine (Heyman, 2005). For example, conservation NGOs promoting "consume to conserve" campaigns might not consider whether the good or service they are selling is actually needed by consumers or produced in an environmentally-sound or socially-just way. Encouraging the purchase of yet another reusable bag or sea turtle toy when the consumer does not need it could, despite funding sea turtle conservation through its initial sale, end up contributing to threats to sea turtle conservation later on. Further, some partnerships which are promoted as beneficial for sea turtle conservation, may in fact have more problematic elements that should be considered. For example, developing a contract

with corporate partners, such as through the AmazonSmile program, may be more problematic than it initially appears. For example, while a certain percentage of certain sales might benefit a sea turtle conservation organization that very same organization may simultaneously be involved in reducing plastics in the environment, without considering the tonnes of packaging plastics used to ship Amazon goods. Therefore, one compelling reason for the ISTCC to engage with consumption, including that of its members and member organizations, is so that it can more fully begin to examine how related activities do/do not fit with overarching community values and goals. I would encourage the ISTCC to reflect upon their relationship with consumption through these roles (e.g. marketer and seller) to ensure that members are comfortable with the ways their consumer power, vendor power, and promoter power are being employed. Are all of these in line with community goals?

Mixed and, at times, Inadequate Language

Along with failing to consider certain kinds of fundraising and awareness campaigns as consumption and consumptive, ISTCC support of sustainable seafood programs contains some mixed messaging. Survey respondents clearly identified the seafood industry, and fisheries more generally, as among the greatest threats to sea turtles today. This is substantiated by literature that comes from the ISTCC. A few respondents raised concerns that sustainable seafood does not really exist. Concerns about certification and the truth behind claims of 'sustainable seafood' means also exist in the literature (Konefal, 2013; Kvalvik et al., 2014; Olson, Clay, & Pinto da Silva, 2014). Despite misgivings by a few respondents, both the observed community messaging and the survey responses generally endorse sustainable seafood and related certification programs as contributing to sea turtle

conservation, by offering consumers information and guidance in choosing less destructive options.

Both the 'dolphin-friendly' tuna campaign and labelling programs such as Monterey Aquarium's Seafood Watch are heralded as successes by respondents, within ISTCC messaging, and within (some of) the literature. However, despite other literature questioning these practices, this group seems reluctant to question or critique the main campaigns, and the evidence they are based upon. And yet, important related questions remain such as: why did the general move to dolphin-friendly tuna not decrease sea turtle bycatch as well? (And therefore, what should related community messaging on such products be?) Why does Seafood Watch program still only have limited uptake among North American consumers, and if this remains the case, what actions should be taken to further steer consumers away from consumer goods resulting from detrimental forms of fishing? Similarly, what can be done to expand industry modifications so that they have greater reach and benefit more than one target animal? By now it is well known that 'dolphin-friendly' conservation campaigns might not, for example, end up benefitting sharks or sea turtles. Lastly, are campaigns such the Seafood Watch program expecting the right among of knowledge of target consumers? Such questions could be an important part of expanding community discussions of consumption by members of the ISTCC. Resulting conclusions could also enable members to push for related (re)investigations of turtle-friendly alternatives.

While the ISTCC's main common environmental focus is sea turtles, collected responses in this project suggest that environmental and consumption-related concerns do not stop at sea turtles—they entail greater ecosystems and networks of relationships, and potential consumption-related impacts on all of these. Different people embrace different

definitions of nature. Understandings of nature can impact related opinions and views of conservation (Robbins, 2012). Respondent answers captured in this project illustrate that their 'carescapes' include nature (including sea turtles), but also humans (Popke, 2006). A more holistic embracing of these concepts for others and themselves may allow for planning and evaluation of programs that are geared towards their target and more likely to enact behaviour change.

When consider ISTCC messaging, there is limited questioning of ongoing seafood and fish consumption overall. This might be a missed opportunity since reducing demand for seafood would reduce associated bycatch and other threats to sea turtles. The emphasis, it seemed, was not on questioning whether we should eat fish, shrimp, and other seafood, but instead on educating consumers about sustainable seafood certifications or programs. Current research and a few respondents discussed some of these seafood certification programs as being problematic because they can result in lowered standards (Konefal, 2013; Kvalvik et al., 2014; Olson, Clay, & Pinto da Silva, 2014). The dominant message to North American consumers with regards to seafood consumption is about redirecting, rather than rethinking or reducing our consumption. With greater discussions of consumption patterns within the community and more generally, the ISTCC may rethink certain strategies and endorsements, choosing to try new and more radical suggestions.

The lack of radical or more demanding pressures on North American consumers, coming from the ISTCC might have to do with the scale, reach, and complexity of our consumption. Are members, groups, and campaigns avoiding targeting it more directly and in more myriad ways because North American consumption appears to be so difficult to change? Is there an unspoken understanding among sea turtle conservationists that calling for

small changes from members of their own community (ISTCC, or smaller local communities where members live) is a good idea, but that calling for greater changes from the general population would be too time consuming, difficult, and frustrating? More expansive, direct, and complex targeting would indeed require more resources and creativity, but it may be critical to sea turtle conservation in the long run. If the less obvious consumption habits of those who live at greater distances (e.g. spatially, culturally, socially, and conceptually) from nesting beaches are omitted from the discussion, which direct and indirect negative impacts on sea turtles and their greater environments are being ignored? It is important to raise such questions, and to integrate theory and frameworks to address these questions, if we are to truly contemplate the intersections between conservation and consumption in more comprehensive ways.

Overconfidence in Information Provision

One of the reasons I chose this community as a case study, is that these respondents would be very connected to conservation, and very well informed. Indeed, some respondents included references to sea turtle conservation experiences (e.g. volunteer work scenarios) that influenced their consumption habits in a positive manner, with likely benefits for sea turtle conservation (e.g. have induced them to recycle more; have pushed them to eat sustainable seafood). Some of these same respondents, however, with close proximity to related negative impacts of some goods, admitted to continuing to purchase and consume items that 'make them happy' despite the associated negative impacts on sea turtles. In other words, sea turtle conservationists are only human, and are consumers within North America like everyone else. This admission fits with literature cited earlier in Chapter 2 about consumer identities and the various priorities we wrestle with in our everyday consumption. This internal

prioritization is reflected in respondents' answers about certain purchases or patterns inducing guilt in them. Some respondents acknowledge that despite related knowledge and guilt, some exceptions "have to happen". This indicates that conservationists are not immune as we might imagine from competing consumer priorities at the cash register. The difference between consumption acts suggested by a person's knowledge and values and their actual consumer behaviour is the "intention-behaviour gap" (Carrington et al., 2014; Dowd & Burke, 2013). This gap was reflected in respondent answers and observations that I made at the Symposium.

That the "intention-behaviour gap" exists and persists among conservationists (Carrington et al., 2014), and that it is reflected in this project data, raises some interesting questions. First, perhaps this gap and our simultaneous acceptance of it, alongside our serious attention to addressing it or closing it, more effectively helps to explain the lack of more demanding or radical consumption messaging in the ISTCC community. This lack both reflects this gap and encourages it. For example, does an absence of more extreme calls for consumption changes help, by their absence, to reinforce or encourage everyday rationalizations of consumption acts that are undesirable for sea turtle conservation? Do such absences de facto condone or encourage bad member behaviours and/or peer pressure to continue consumption business as usual? If members sense, via community messaging, that there is no extreme pressure to stop eating shrimp, and understand this to mean that most in the group will likely continue eating shrimp, does it encourage them to continue eating shrimp? As well, in such a consumption culture, are members encouraged to consume without change by the rather soft messaging directed at them? These are important questions

for this community to consider if it is truly interested in advancing sea turtle conservation, and conservation more generally.

Discussions about 'education' or providing knowledge of products, industries, and their impacts were plentiful in the 24 completed surveys. Providing better information was often suggested as the best way to change consumption habits of North Americans and people who live close to turtle nesting beaches. Some respondents focused on 'education' in terms of informing consumers of the harm their consumption decisions could have on sea turtles. As well, many respondents described consumers from North America as being ignorant to the plight of sea turtles. This inconsistency between conservationists as consumers and the confidence respondents have with education is noteworthy. Although these respondents hold deep knowledge about threats to sea turtles, and are intimately involved in related conservation efforts, they admitted to making consumption choices that do not align with their knowledge. And still, their statements reflect a strong belief that promoting education and sharing knowledge about sea turtles and their plights is a critical path to altering larger patterns of consumer behaviour.

This reliance on education is not validated by academic literature, nor by the respondents themselves, yet the relationship between education and behaviour modification dominates messaging to North American consumers. For example, most discouragement of plastics consumption involves calls for reducing the purchase of plastics through the use of more durable or alternative goods, and an emphasis on the importance of recycling. The related imagery is often directly linked to the types of known impacts associated with certain products or industries. Pictures of sea turtles eating plastic bags or caught in nets, and images of beaches and oceans with plastics in them are common visuals used to reinforce

these messages. Such materials often highlight known negative impacts of plastics and fishing practices on sea turtles (e.g. pictures of plastics found inside a necropsied sea turtle). Images are often accompanied about facts related to the scale of impacts, and/or suggested ways to help prevent such impacts. Despite the pervasive nature of such messaging, without greater attention to the relationships between sea turtle messaging and consumer behaviour, it is impossible to say what kinds of impact such messaging is having on North American consumer choices. It is notable though, that most calls only for minor behaviour modifications, and not a lifestyle overhaul. Both the survey responses and analysis of ISTCC messaging suggest that this community has failed to embrace that fact that there is little information to support the effectiveness of its main strategy: information provision

Reconceptualize Education, Consumption, and Messaging

Political ecology is a framework that stresses critiquing political and individual decisions, related discourses, and sources of influence on how we understand our environment, and make decisions about it (Robbins, 2012). Conservation policies and actions are informed by the viewpoints of those making the decisions, and not necessarily by those impacted by such policies and actions (Campbell et al., 2008; Heyman, 2005; Meletis, 2007; Robbins, 2012). Better integrating the consumption behaviours of its own members into discussions of consumption-related impacts on sea turtles would allow the ISTCC to turn the lens on itself, its members, and its internal and external influences. This would help expose gaps between community intention, awareness, and consumption. Such action would fit well with a political ecology approach, as many of its proponents ask researchers to look beyond simple critiques and offer possible solutions for improving the world through concrete actions (Robbins, 2012).

Institutions or communities investing in self-evaluation and seeking solutions with respect to improving own actions fits with the ethics of political ecologists who call for action. To "move forward", we must reflect on the roles of institutions and individuals, including those 'close to home', and taking corrective actions to diminish related negative impacts and improve related positive outcomes. This is in line with the thinking of a prominent but controversial senior member of the ISTCC, Jack Frazier. He stated that the greatest tool in a conservationist's toolkit is a mirror, so that one might consider their own connections to conservation issues, and contemplate improved actions (J. Frazier, personal communications, March 27, 2015). With this in mind, I sought to bring this Masters project to a conclusion with suggestions for how the ISTCC might address consumption and conservation in the future, including that of its own North American members (and others). These suggestions might also be of interest to other conservation groups and communities who closely watch and follow sea turtle conservation activity, and who also effectively harness 'consume to conserve' campaigns to fund their own work.

Building on ideas in previous chapters, I submit that the emphasis on information provision in the hopes of changing consumer behaviours is generally insufficient. My survey responses reveal that other tools must be used, as even informed, conservation-aware and involved consumers sometimes disregard those aspects of their identity in order to meet other needs and roles within their lives when acting as consumers (e.g. eating shrimp, not always recycling). The literature on social marketing can be an ideal resource for conservation groups. Social marketing is about considering the goals and objectives of the organization doing the selling, as well as the needs and wants of the target community. Commitment,

social norms, social diffusion, prompts, effective messaging, and incentives are all tools within Social Marketing that can be used to change behaviour (McKenzie-Mohr, 2011).

Rare is an NGO based out of the United States that successfully uses social marketing theory to generate behaviour change in many countries including Indonesia, Philippines and Columbia (Sowards, Tarin, & Upton, 2017). Figure 6.1 outlines Rare's methods during their Pride campaigns which "encourages local communities to take pride in their natural resources and work collaboratively in create environmental sustainable practices" (Sowards, et al., 2017, p. 5).

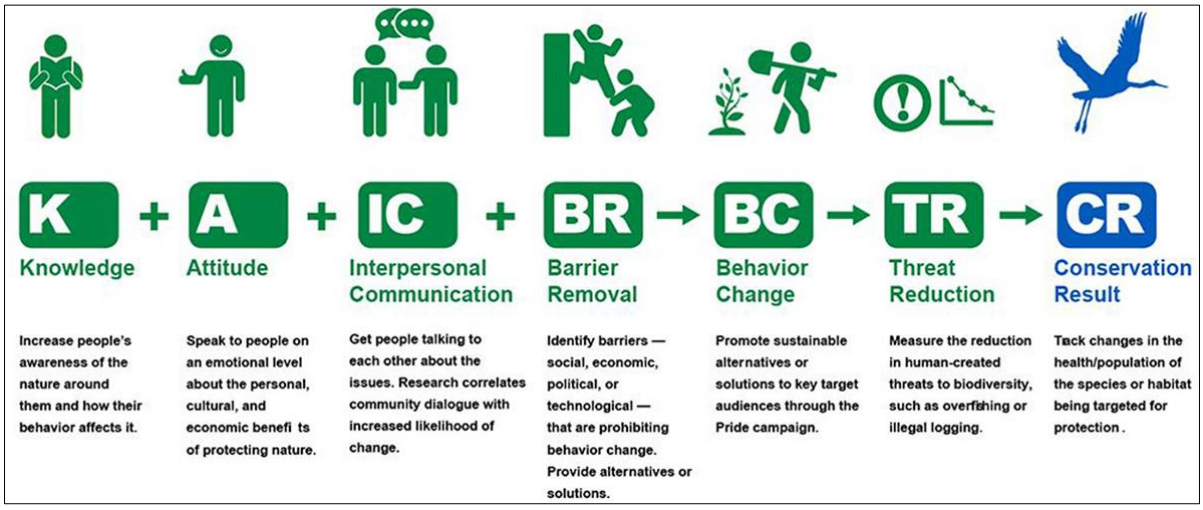


Figure 6.1 – Rare's theory of change model (Sowards et al., 2017; Rare, 2018)

This flow chart demonstrates how much more is included in social marketing than just knowledge provision. Communication with and identifying barriers for the target group, and evaluation of the campaign are all important steps. This is generally viewed as more interactive as well, built upon social relations, not simply the provision of texts and images.

The needs and wants of the target group is an important part of generating behaviour change (McKenzie-Mohr, 2011). For example, campaigns promoting the banning of disposable plastic straws are a type of plastic-free campaign noticeable right now. Straws are

a good example here, as one could simply campaign about the damaging environmental impacts of straws, or one could run a more multi-faceted and interactive outreach program. For example, groups interested in promoting this behaviour modification (going strawless) might experience greater success if data was gathered with the help of local restaurants and residents with respect to why some people might be resistant to the proposed change (McKenzie-Mohr, 2011; Sowards et al., 2017). For example, residents may be concerned about the hygiene of reusable straws. Other residents may not be aware of alternatives to disposable plastic straws, or might be concerned about costs associated with the purchase of reusable straws. Restaurant operators might have similar concerns on a larger scale, or they may be concerned about theft of more durable straws, and the cost that it might result in. There might also be food safety regulations acting as barriers to change as well. Armed with greater and more diverse information on what is stopping people from making the change, conservation groups could facilitate information sharing and input new information into more appropriate solutions.

Earlier, I discussed the idea of conspicuous consumption (Veblen, 1899), explaining how consumption and material goods can be used to demonstrate belonging to a particular group or class, especially when the consumption is overt and excessive. For example, purchasing a new sea turtle-themed piece of clothing might be important to an individual as it represents a new conservation program they are contributing to, at the same time that it is a 30th T-shirt for which they have no real need. Identity confirmation or re-affirmation might override concerns about overconsumption. As this example illustrates, factors such as commitment, social norms, and social diffusion are also key considerations in trying to understand consumption (and conservation). When a community adopts certain behaviours,

people who do not participate tend to stand out as non-conforming in the context of the dominant consumer culture. They may, as a result, be negatively impacted (socially; professionally) because of it. When whole groups engage in environmentally-desirable behaviours, this brings related social infrastructure, reducing potential barriers, and increasing the sense of belonging to those who participate (McKenzie-Mohr, 2011), building on Veblen's notions of the relationships between consumption and group membership or status, there are new and exciting opportunities here for this community. For example, why not use the strong community affiliation that conservationists feel with the ISTCC to build positive social norms about desirable behaviours? Why not have optimum sea turtle-friendly consumer choices, as decided and "recognized" by the ISTCC, reflected at each and every Symposia? Why not ensure that community consumption practices at the Symposia better reflect the community's conservation ethics (e.g. banning disposable water bottles on site; ending the practice of welcome disposable items and registration bags)?

Research conducted by McKenzie-Mohr et al. (2012) states that "the cornerstone of sustainability is behaviour change" (p 3), not information provision. They underscore frequent over-emphasis on knowledge and information provision in pro-environmental campaigns as flawed. Instead, they suggest that behaviour is aligned with our individual mix of priorities, and that behaviour can also be affected by barriers to change; if such aspects are not addressed, the potential for long term change is limited. Building on successes, and utilizing the body of knowledge available on consumer behaviour and marketing influencing behaviour could mean making greater strides towards sea turtle conservation goals, with less money and in less time. The promotion of information-based programing may not be effective in generating behaviour change, even through generations. Addressing regional or

local barriers, ensuring awareness and understanding of social norms and how they can work within messaging, and constant evaluation once programs are operational, are all important steps. For example, a WiLDCOAST poster campaign featuring Dorismar (a famous model), who used her appeal with men to debunk the myth that sea turtle products are aphrodisiacs, was deemed successful because rather than simply providing information, it confronted and challenged social norms (http://www.wildcoast.net/who-we-are/history/2005).

Finally, there should be discussion within this community about enlarging the focus, and engaging the consumption habits of people who live at greater distances from sea turtle nesting beaches. One of the main anti-consumption messages from sea turtle conservationists is the rejection of sea turtle meat (aimed at those who live closer to nesting beaches), while the average North American, whose indirect consumption habits are arguably more damaging to sea turtle conservation then direct takes, are often asked to reduce plastic use and purchase sustainable seafood. Perhaps that is all this community wants to ask of North American consumer culture, however, reflecting and evaluating these campaigns and their effectiveness should be occurring with greater frequency, as part of its ongoing activities.

Engaging with the North American consumer can occur in multiple ways. Small reminders or "prompts" on social media feeds (e.g. Facebook, Twitter) can help keep already knowledgeable, environmentally minded consumers focused on engaging in positive behaviours for sea turtle health (McKenzie-Mohr, 2011). At the same time, I would suggest the ISTCC carefully choose the images that they share on social media. For example, as mentioned on p. 56, images of plastic filled beaches provide some people with a reason not to adopt more environmentally friendly behaviour, as the image provides evidence that the social norm is to litter. These individuals are probably consumers who are not as prone to

making environmentally positive consumer decisions in the first place (McKenzie-Mohr et al., 2012).

What this project makes clear is that consumption and sea turtle conservation interact in many ways. It is possible for individuals to consume in order to benefit the goals of the ISTCC. In fact, the ISTCC actively promotes certain types of consumption. In other words, sea turtle conservation leads to certain types of consumption. Expanding the conservation community constructed definition of the term 'consumption' to include actions utilized by this community, such as fundraising by selling products (e.g. turtle license plates) and hosting ecotourism trips to nesting beaches around the world, would be a productive first step to ensure this community is utilizing consumption (and all its strengths) for the benefit of sea turtle conservation and minimizing any potential harm.

Consumption with Conservation

This case study adds data to the body of knowledge that consumption and conservation are a false dichotomy. Dwyer and Butler (2009) wrote:

> A theme throughout human history is our powerful and persistent tendency to frame complex issues as a struggle between two opposing sides (Gould, 2003). Surely the time has come to abandon these constructed dichotomies and embrace and explore the complexity and richness of the space between entrenched perspectives. (p. 61)

Consumption is not a rival of conservation, but an integral part of the web that balances and aids it. Consumption by definition can lead to the need for conservation. Some sea turtle conservation is driven and funded by consumption. By acknowledging the role consumption plays in sea turtle conservation, both internally and publicly, the ISTCC reduces risks and confusion that may arise from denying this important relationship. For example, public discussion could decrease the risk of alienating consumers who might view consumption

activities promoted for the funding of conservation as conflicting or hypocritical to sea turtle conservation goals (Barone, Norman, & Miyazaki, 2007; Black & Cherrier, 2010). Meanwhile, internally discussing consumption and its true role within sea turtle conservation (e.g. the power they hold as sellers and consumers) may offer insights as to how the community can improve consumption habits (individually and as a group) and construct its internal and external policies (Robbins, 2012). Through expanded and ongoing reflection and conversations, the ISTCC can move forward in limiting harm to sea turtles, not only from other actors, groups and industries, but also via attention to its own community and impacts. Perhaps it is time for (re)branding the ISTCC via social marketing and related efforts, so that its own internal policies and activities best reflect, fund, and support the valiant efforts and energies the community invests into saving sea turtles.

References

Abdulqader, E. A. A., & Miller, J. (2012). Marine turtle mortalities in Bahrain Territorial waters. *Chelonian Conservation and Biology, 11*(1), 133-138.

Agnew, D. J., Gutierrez, N. L., Stern-Pirlot, A., & Hoggarth, D. D. (2014). The MSC experience: developing an operational certification standard and a market incentive to improve fishery sustainability. *Ices Journal of Marine Science, 71*(2), 216-225. doi:10.1093/icesjms/fst091

Alfaro-Shigueto, J., Mangel, J. C., Bernedo, F., Dutton, P. H., Seminoff, J. A., & Godley, B. J. (2011). Small-scale fisheries of Peru: a major sink for marine turtles in the Pacific. *Journal of Applied Ecology, 48*(6), 1432-1440. doi:10.2307/41318978

Amazon.com. (2015). AmazonSmile: select a charity to start shopping. Retrieved from http://smile.amazon.com/gp/chpf/search?ie=UTF8&q=sea%20turtle"

Animal Experience International. (2014). Live your dreams. Travel the world. Volunteer with animals. Retrieved from http://www.animalexperienceinternational.com/index.html

Asselin, M. E. (2003). Insider research: Issues to consider when doing qualitative research in your own setting. *Journal for Nurses in Staff Development*, *19*(2), 99-103.

Ayer, N., Côté, R. P., Tyedmers, P. H., & Martin Willison, J. H. (2009). Sustainability of seafood production and consumption: an introduction to the special issue. *Journal of Cleaner Production, 17*(3), 321-324. doi:http://dx.doi.org/10.1016/j.jclepro.2008.09.003

Bailey, C., White, C., & Pain, R. (1999). Evaluating qualitative research: dealing with the tension between 'science' and 'creativity'. *Area, 31*(2), 169-178.

Baird, I. G., & Quastel, N. (2011). Dolphin-safe tuna from California to Thailand: localisms in environmental certification of global commodity networks. *Annals of the Association of American Geographers, 101*(2), 337-355. doi:10.1080/00045608.2010.544965

Banks, S. N. K. (2008). *Plastic bags: reducing their use through regulatations and other initiatives*. (PRB 08-27E). Ottawa: Parlimentary Library Retrieved from http://publications.gc.ca/collections/collection_2009/bdp-lop/prb/prb0827-e.pdf.

Barnett, C. (2005). Ways of relating: hospitality and the acknowledgement of otherness. *Progress in Human Geography, 29*(1), 5-21. doi:10.1191/0309132505ph535oa

Barnett, C., & Land, D. (2007). Geographies of generosity: beyond the 'moral turn'. *Geoforum, 38*(6), 1065-1075.

Barone, M. J., Norman, A. T., & Miyazaki, A. D. (2007). Consumer response to retailer use of cause-related marketing: is more fit better? *Journal of Retailing, 83*(4), 437-445. doi:http://dx.doi.org/10.1016/j.jretai.2007.03.006

Bates, C. H. (2010). Use of social marketing concepts to evaluate ocean sustainability campaigns. *Social Marketing Quarterly, 16*(1), 71-96. doi:10.1080/15245000903528357

Baxter, J. (2010). Case studies in qualitative research. In I. Hay (Ed.), *Qualitative Research Methods in Qualitative Research* (3 ed., pp. 81-98). Oxford: Oxford University Press.

Baxter, J., & Eyles, J. (1997). Evaluation qualitative reserach in social geography: establishing 'rigour' in interview analysis. *Transactions of the Institute of British Geographers, 22*, 505-525.

Belk, R. W. (1988). Possessions and the extended self. *Journal of consumer research*, *15*(2), 139-168.

Benhardouze, W., Aksissou, M., & Tiwari, M. (2012). Incidental captures of sea turtles in the driftnet and longline fisheries in northwestern Morocco. *Fisheries Research, 127*, 125-132. doi:10.1016/j.fishres.2012.04.002

Bézy, V. S., Valverde, R. A., & Plante, C. J. (2015). Olive ridley sea turtle hatching success as a function of the microbial abundance in nest sand at Ostional, Costa Rica. *Plos One, 10*(2), e0118579. doi:10.1371/journal.pone.0118579

Black, I. R., & Cherrier, H. (2010). Anti-consumption as part of living a sustainable lifestyle: daily practices, contextual motivations and subjective values. *Journal of Consumer Behaviour*, 437-453.

Bourdieu, P. (1986). The Forms of Capital. In J. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241-258). New York: Greenwood.

Bradshaw, M., & Stratford, E. (2010). Qualitative research design and rigour. In I. Hay (Ed.), *Qualitative Research Methods in Human Geography* (3 ed., pp. 69-80). Oxford: Oxford University Press.

Braverman, I. (2012). *Zooland: The Institution of Captivity*: Stanford University Press.

Brenton, S. (2013). The political motivations of ethical consumers. *International Journal of Consumer Studies, 37*(5), 490-497. doi:10.1111/ijcs.12024

Brunk, K. H., & Blümelhuber, C. (2011). One strike and you're out: qualitative insights into the formation of consumers' ethical company or brand perceptions. *Journal of Business Research, 64*(2), 134-141. doi:http://dx.doi.org/10.1016/j.jbusres.2010.02.009

Bryant, R. L., & Goodman, M. K. (2004). Consuming narratives: the political ecology of 'alternative' consumption. *Transactions of the Institute of British Geographers, 29*(3), 344-366. doi:10.1111/j.0020-2754.2004.00333.x

Bryman, A. (2004). Triangulation and measurement. Retrieved from http://www.referenceworld.com/sage/socialscience/triangulation.pdf

Bugoni, L., Krause, L. g., & Virgínia Petry, M. (2001). Marine debris and human impacts on sea rurtles in southern Brazil. *Marine Pollution Bulletin, 42*(12), 1330-1334. doi:http://dx.doi.org/10.1016/S0025-326X(01)00147-3

Burnett, K. (1992). Relationship fundraising. *A Donor-Based Approach to the Business of Raising Money. London*.

Cabrera, S. A., & Williams, C. L. (2014). Consuming for the social good: marketing, consumer citizenship, and the possibilities of ethical consumption. *Critical Sociology, 40*(3), 349-367. doi:10.1177/0896920512458599

Campbell, L. M. (2002). Science and sustainable use: views of marine turtle conservation experts. *Ecological Applications, 12*(4), 1229-1246. doi:10.2307/3061048

Campbell, L. M. (2007). Local conservation practice and global discourse: a political ecology of sea turtle conservation. *Annals of the Association of American Geographers, 97*(2), 313-334. doi:10.2307/4620262

Campbell, L. M., Gray, N. J., & Meletis, Z. A. (2008). Political ecology perspectives on ecotourism to parks and protected areas. In K. S. Hanna, D. A. Clark, & D. S. Slocombe (Eds.), *Transforming Parks and Protected Areas: Policy and Governance in a Changing World* (pp. 200-221). Abingdon, UK: Routledge and Taylor and Francis.

Campbell, L. M., & Meletis, Z. A. (2011). Agreement on water and a watered-down agreement: the political ecology of contested coastal development in Down East, North Carolina. *Journal of Rural Studies, 27*(3), 308-321. doi:http://dx.doi.org/10.1016/j.jrurstud.2011.06.002

Cardoso, C., Lourenço, H., Costa, S., Gonçalves, S., & Nunes, M. L. (2013). Survey into the seafood consumption preferences and patterns in the portuguese population: gender and regional variability. *Appetite, 64*(0), 20-31. doi:http://dx.doi.org/10.1016/j.appet.2012.12.022

Canadian Sea Turtle Network. (2014). Help us get the message out there. Retrieved from http://www.freetheleatherback.com/message.html

Carrier, J. G. (2004). *Confronting Environments: Local Understanding in a Globalizing World* (J. G. Carrier Ed.). Walnut Creek, CA: AltaMira Press.

Carrington, M. J., Neville, B. A., & Whitwell, G. J. (2014). Lost in translation: exploring the ethical consumer intention–behavior gap. *Journal of Business Research, 67*(1), 2759-2767. doi:http://dx.doi.org/10.1016/j.jbusres.2012.09.022

Casale, P. (2011). Sea turtle by-catch in the Mediterranean. *Fish and Fisheries, 12*(3), 299-316. doi:10.1111/j.1467-2979.2010.00394.x

Cherrier, H. (2007). Ethical consumption practices: co-production of self-expression and social recognition. *Journal of Consumer Behaviour, 6*(5), 321-335. doi:10.1002/cb.224

Cherrier, H. (2009). Anti-consumption discourses and consumer-resistant identities. *Journal of Business Research, 62*(2), 181-190. doi:http://dx.doi.org/10.1016/j.jbusres.2008.01.025

Chowdhury, M. S. H., Izumiyama, S., Nazia, N., Muhammed, N., & Koike, M. (2014). Dietetic use of wild animals and traditional cultural beliefs in the Mro community of Bangladesh: an insight into biodiversity conservation. *Biodiversity, 15*(1), 23-38. doi:10.1080/14888386.2014.893201

Clayton, S., & Myers, G. (2009). *Conservation Psychology: Understanding and Promoting Human Care for Nature*. Chinchester, West Sussex: Wiley-Blackwell.

Clifford, J. (1986). Partial truths. In J. Clifford & G. Marcus (Eds.), *Writing Culture: The Poetics and Politics of Ethnography* (pp. 1-26). Berkeley: University of California Press.

Colding, J., & Folke, C. (2001). Social taboos: "invisible" systems of local resource managment and biological conservation. *Ecological Applications, 11*(2), 584-600. doi:10.1890/1051-0761(2001)011[0584:STISOL]2.0.CO;2

Connolly, J., & Prothero, A. (2008). Green Consumption: life-politics, risk and contradictions. *Journal of Consumer Culture, 8*(1), 117-145. doi:10.1177/1469540507086422

Cope, M. (2010). Coding qualitative data. In I. Hay (Ed.), *Qualitative Research Methods in Human Geography* (3 ed.). Oxford: Oxford University Press.

Creswell, J. W. (2007). *Qualitative Inquiry & Research Design: Choosing Among Five Approaches* (2nd ed.). Thousand Oaks, California: Sage Publications, Inc.

Crewe, L., & Lowe, M. (1995). Gap on the map? Towards a geography of consumption and identity. *Environment & Planning A, 27*(12), 1877-1898.

Cronon, W. (1995). The trouble with wilderness; or, getting back to the wrong nature. In W. Cronon (Ed.), *Uncommon Ground* (pp. 69-90). New York: W. W. Norton & Company.

Dauvergne, P. (2008). *The Shadows of Consumption: Consequences for the Global Environment*. Cambridge, Massachusetts and London, England: The MIT Press.

Dauvergne, P. (2010). The Problem of Consumption. *Global Environmental Politics, 10*(2), 1-10. doi:10.1162/glep.2010.10.2.1

Dendler, L. (2014). Sustainability Meta Labelling: An effective measure to facilitate more sustainable consumption and production? *Journal of Cleaner Production, 63*(0), 74-83. doi:http://dx.doi.org/10.1016/j.jclepro.2013.04.037

Denzin, N. K., & Lincoln, Y. S. (2011). The discipline and practice of qualitative research *The Sage Handbook of Qualitative Research* (4 ed., pp. 1-19). Thousand Oaks: Sage.

The Dictionary of Human Geography. (2009). (D. Gregory, R. Johnston, G. Pratt, M. Watts, J., & S. Whatmore Eds. 5 ed.). West Sussex, UK: Wiley-Blackwell.

Donlan, C. J., Wingfield, D. K., Crowder, L. B., & Wilcox, C. (2010). Using expert opinion surveys to rank threats to endangered species: a case study with sea turtles. *Conservation Biology, 24*(6), 1586-1595. doi:10.1111/j.1523-1739.2010.01541.x

Dowd, K., & Burke, K. J. (2013). The influence of ethical values and food choice motivations on intentions to purchase sustainably sourced foods. *Appetite, 69*(0), 137-144. doi:http://dx.doi.org/10.1016/j.appet.2013.05.024

Dowling, R. (2010). Power, Subjectivity, and Ethics in Qualitative Research. In I. Hay (Ed.), *Qualitative Research Methods in Human Geography* (3 ed., pp. 26-39). Oxford: Oxford University Press.

Dwyer, S. C., & Buckle, J. L. (2009). The space between: on being an insider-outsider in qualitative research. *International Journal of Qualitative Methods, 8*(1), 54-63. doi: 10.1177/160940690900800105

Ebreo, A., Hershey, J., & Vining, J. (1999). Reducing solid waste: linking recycling to environmentally responsible consumerism. *Environment and Behavior, 31*(1), 107-135.

Eisen, B., & Green, K. P. (2012). *Resource Consumption and Economic Production in Canada and the United States: How Economic Activity in North America Benefits People Everywhere*. Retrieved from Winnipeg, MB, CAN: http://site.ebrary.com/lib/unbc/docDetail.action?docID=10562980

Encyclopedia of Case Study Research. (2010). (A. J. Mills, G. Durepos, & E. Wiebe Eds. Vol. 1). Thousand Oaks, CA: Sage.

England, K. (2010). Home, work and the shifting geographies of care. *Ethics, Place & Environment, 13*(2), 131-150. doi:10.1080/13668791003778826

Farr, M., Stoeckl, N., & Alam Beg, R. (2014). The non-consumptive (tourism) 'value' of marine species in the Northern section of the Great Barrier Reef. *Marine Policy, 43*(0), 89-103. doi:http://dx.doi.org/10.1016/j.marpol.2013.05.002

Garcı, A., Ceballos, G., & Adaya, R. (2003). Intensive beach management as an improved sea turtle conservation strategy in Mexico. *Biological Conservation, 111*(2), 253-261. doi:http://dx.doi.org/10.1016/S0006-3207(02)00300-2

Gibson, C. C., Ostrom, E., & Ahn, T. K. (2000). The concept of scale and the human dimensions of global change: a survey. *Ecological Economics, 32*(2), 217-239. doi:http://dx.doi.org/10.1016/S0921-8009(99)00092-0

Gilbert, M. (1994). The politics of location: doing feminist research at 'home'. *Professional Geographer, 46*(1), 90-96.

González-Carman, V., Machain, N., Albareda, D., Mianzan, H., & Campagna, C. (2012). Legal and institutional tools to mitigate marine turtle bycatch: Argentina as a case study. *Marine Policy, 36*(6), 1265-1274. doi:http://dx.doi.org/10.1016/j.marpol.2012.03.014

González Carman, V., Acha, E. M., Maxwell, S. M., Albareda, D., Campagna, C., & Mianzan, H. (2014). Young green turtles, Chelonia mydas, exposed to plastic in a frontal area of the SW Atlantic. *Marine Pollution Bulletin, 78*(1–2), 56-62. doi:http://dx.doi.org/10.1016/j.marpolbul.2013.11.012

Gould, S. J. (2003). *The hedgehog, the fox, and the magister's pox: Mending the gap between science and the humanities.* New York: Three Rivers.

Government of Canada. (2013). *Canada's Fisheries Fast Facts 2012*. (DFO/2013-1858). Ottawa, ON: Economic Analysis and Statistics, Her Majesty the Queen in Right of Canada.

Greenpeace. (2015). Greenpeace: greenwashing. Retrieved from http://www.stopgreenwash.org/

Gulf World Marine Institute. (2015). Donate. Retrieved from http://www.gulfworldmarineinstitute.org/

Hall, S. M. (2011). Exploring the 'ethical everyday': an ethnography of the ethics of family consumption. *Geoforum, 42*(6), 627-637. doi:http://dx.doi.org/10.1016/j.geoforum.2011.06.009

Hamann, M., Godfrey, M. H., Seminoff, J. A., Arthur, K., Barata, C. R., Bjorndal, K. A., . . . Bodley, B. J. (2010). Global research priorities for sea turtles: informing management and conservation in the 21st century *Endangered Species Research, 11*, 245-269.

Hart, K. A., Gray, T., & Stead, S. M. (2013). Consumptive versus non-consumptive use of sea turtles? Stakeholder perceptions about sustainable use in three communities near Cahuita National Park, Costa Rica. *Marine Policy, 42*(0), 236-244. doi:http://dx.doi.org/10.1016/j.marpol.2013.03.008

Harvey, W. S. (2010). Methodological approaches for interviewing elites. *Geography Compass, 4*(3), 193-205.

Hawkins, R. (2012). Shopping to save lives: gender and environment theories meet ethical consumption. *Geoforum, 43*(4), 750-759. doi:http://dx.doi.org/10.1016/j.geoforum.2011.12.009

Heath, T., O'Malley, L., Heath, M., & Story, V. (2014). Caring and conflicted: mothers' ethical judgments about consumption. *Journal of Business Ethics*, 1-14. doi:10.1007/s10551-014-2441-z

Heyman, J. M. (2005). The political ecology of consumption: beyond guilt and greed. In S. Paulson & L. L. Gezon (Eds.), *Political Ecology Across Spaces, Scales, and Social Groups* (pp. 113-132). London: Rutgers University Press.

Hirai, H., Takada, H., Ogata, Y., Yamashita, R., Mizukawa, K., Saha, M., . . . Laursen, D. (2011). Organic micropollutants in marine plastics debris from the open ocean and remote and urban beaches. *Marine Pollution Bulletin, 62*(8), 1683-1692.

Hoarau, L., Ainley, L., Jean, C., & Ciccione, S. (2014). Ingestion and defecation of marine debris by loggerhead sea turtles, Caretta caretta, from by-catches in the South-West Indian Ocean. *Marine Pollution Bulletin, 84*(1–2), 90-96. doi:http://dx.doi.org/10.1016/j.marpolbul.2014.05.031

Hookway, N. (2008). `Entering the blogosphere': some strategies for using blogs in social research. *Qualitative Research, 8*(1), 91-113. doi:10.1177/1468794107085298

Humber, F., Godley, B. J., & Broderick, A. C. (2014). So excellent a fishe: a global overview of legal marine turtle fisheries. *Diversity and Distributions, 20*, 579-590.

International Sea Turtle Society. (2014). International Sea Turtle Society Member List. Retrieved from http://www.seaturtlesociety.org/members/membership_list.shtml?keyword=cherise

Irvine, F., Gracey, C., Jones, O. S., Roberts, J. L., Tamsons, R. E., & Tranter, S. (2008). Research awareness: making learning relevant for pre-registration nursing students. *Nurse Education in Practice, 8*(4), 267-275. doi:http://dx.doi.org/10.1016/j.nepr.2007.09.006

Ivar do Sul, J. A., Santos, I. R., Friedrich, A. C., Matthiensen, A., & Fillmann, G. (2011). Plastic pollution at a sea turtle conservation area in NE Brazil: contrasting developed and undeveloped beaches. *Estuaries and Coasts, 34*, 814-823.

Jackson, P., & Thrift, N. (1995). Geographies of Consumption. In D. Miller (Ed.), Acknowledging Consumption. In D. Miller (Series Ed.) (pp. 204-237): Routledge. Retrieved from http://www.mylibrary.com?ID=15812. Retrieved from http://www.mylibrary.com?ID=15812

Jackson, T. (2006). Readings in sustainable consumption. In T. Jackson (Ed.), *The Earthscan Reader in Sustainable Consumption* (pp. 1-23). London and Sterling, VA: Earthscan.

James, M. C., Ottensmeyer, A. C., & Myers, R. A. (2005). Identification of high-use habitat and threats to leatherback sea turtles in northern waters: new directions for conservation. *Ecology Letters, 8*(2), 195-201. doi:10.1111/j.1461-0248.2004.00710.x

Joyner, C. C., & Tyler, Z. (2000). Marine conservation versus international free trade: reconciling dolphins with tuna and sea turtles with shrimp. *Ocean Development & International Law, 31*(1/2), 127-150.

Kirpitchenko, L. & Voloder, L, (2014). Insider research method: The significance of identities in the field. *SAGE Research Methods Cases.* 10.4135/978144627305014533940

Konefal, J. (2013). Environmental movements, market-based approaches, and neoliberalization: a case study of the sustainable seafood movement. *Organization & Environment, 26*(3), 336-352. doi:10.1177/1086026612467982

Krupa, J. (2013). Shopping for good?: The perils of 'ethical consumerism'. *Journal of Retailing and Consumer Services, 20*(2), 248-249. doi:http://dx.doi.org/10.1016/j.jretconser.2012.11.001

Kvalvik, I., Noestvold, B. H., & Young, J. A. (2014). National or supranational fisheries sustainability certification schemes? A critical analysis of Norwegian and Icelandic responses. *Marine Policy, 46*(0), 137-142. doi:http://dx.doi.org/10.1016/j.marpol.2014.01.015

Kwon, E. S., & Sung, Y. (2011). Follow Me! Global Marketers' Twitter Use. *Journal of Interactive Advertising, 12*(1), 4-16. doi:10.1080/15252019.2011.10722187

Lewison, R., Wallace, B., Alafaro-Shigueto, J., Mangel, J. C., Maxwell, S. M., & Hazen, E. L. (2013). Fisheries bycatch of marine turtles: lessons learned from decades of research and conservation. In J. Wyneken, K. J. Lohmann, & J. A. Musick (Eds.), *The Biology of Sea Turtles* (Vol. III, pp. 329-351). Boca Raton, London, New York: CRC Press.

Lewison, R. L., & Crowder, L. B. (2007). Putting longline bycatch of sea turtles into perspective. *Conservation Biology, 21*(1), 79-86. doi:10.2307/4124644

Lloro-Bidart, T. (2015). Neoliberal and disciplinary environmentality and 'sustainable seafood' consumption: storying environmentally responsible action. *Environmental Education Research*, 1-18. doi:10.1080/13504622.2015.1105198

Lury, C. (2011). *Consumer Culture* (2nd ed.). New Brunswick, New Jersey: Rutgers University Press.

Madrigal-Ballestero, R., Schlüter, A., & Claudia Lopez, M. (2013). What makes them follow the rules? Empirical evidence from turtle egg harvesters in Costa Rica. *Marine Policy, 37*(0), 270-277. doi:http://dx.doi.org/10.1016/j.marpol.2012.05.009

Mancini, A., Senko, J., Borquez-Reyes, R., Poo, J. G., Seminoff, J. A., & Koch, V. (2011). To poach or not to poach an endangered species: elucidating the economic and social drivers behind illegal sea turtle hunting in Baja California Sur, Mexico. *Human Ecology, 39*(6), 743-756. doi:10.1007/s10745-011-9425-8

Mascarenhas, R., Santos, R., & Zeppelini, D. (2004). Plastic debris ingestion by sea turtle in Paraíba, Brazil. *Marine Pollution Bulletin, 49*(4), 354-355. doi:http://dx.doi.org/10.1016/j.marpolbul.2004.05.006

McCauley, S. J., & Bjorndal, K. A. (1999). Conservation implications of dietary dilution from debris ingestion: sublethal effects in post-hatchling loggerhead sea turtles. *Conservation Biology, 13*(4), 925-929. doi:10.1046/j.1523-1739.1999.98264.x

McEwan, C., & Goodman, M. K. (2010). Place geography and the ethics of care: introductory remarks on the geographies of ethics, responsibility and care. *Ethics, Place & Environment, 13*(2), 103-112. doi:10.1080/13668791003778602

McGuirk, P. M., & O'Neill, P. (2010). Using questionnaires in qualitative human geography. In I. Hay (Ed.), *Qualitative Research Methods in Human Geography* (pp. 191-216). Oxford: Oxford University Press.

McKenzie-Mohr, D. (2011). *Fostering Sustainable Behavior: An Introduction to Community-Based Social Marketing* (3rd ed.). Gabriola Island, BC: New Society.

McKenzie-Mohr, D., & Schultz, P. W. (2014). Choosing Effective Behavior Change Tools. *Social Marketing Quarterly, 20*(1), 35-46. doi:10.1177/1524500413519257

McKenzie-Mohr, D., Lee, N. R., Schultz, P. W., & Kolter, P. (2012). *Social Marketing to Protect the Environment: What Works*. Gabriola Island, BC: New Society.

Meletis, Z. A. (2007). *Wasted visits? Ecotourism in theory vs. practice, at Tortuguero, Costa Rica.* (3284296 Ph.D.), Duke University, Ann Arbor. Retrieved from http://search.proquest.com/docview/304868682?accountid=14601 ProQuest Dissertations & Theses A&I database.

Meletis, Z. A., & Campbell, L. M. (2007). Call it consumption! Re-conceptualizing ecotourism as consumption and consumptive. *Geography Compass, 1*(4), 850-870.

Meletis, Z. A., & Harrison, E. C. (2010). Tourists and turtles: searching for a balance in Tortuguero, Costa Rica. *Conservation & Society, 8*(1), 26-43.

Miller, D. (1995). *Acknowledging Consumption*: Routledge.

Mrosovsky, N., Ryan, G. D., & James, M. C. (2009). Leatherback turtles: the menace of plastic. *Marine Pollution Bulletin, 58*(2), 287-289. doi:http://dx.doi.org/10.1016/j.marpolbul.2008.10.018

Obbard, R. W., Sadri, S., Wong, Y. Q., Khitun, A. A., Baker, I., & Thompson, R. C. (2014). Global warming releases microplastic legacy frozen in Arctic Sea ice. *Earth's Future, 2*(6), 315-320.

Ocean Conservancy. (2011). *International coastal cleanup 2011 report: trash free seas every piece, every person* (2015). Retrieved from Washington, DC:

Olson, J., Clay, P. M., & Pinto da Silva, P. (2014). Putting the seafood in sustainable food systems. *Marine Policy, 43*(0), 104-111. doi:http://dx.doi.org/10.1016/j.marpol.2013.05.001

Panagopoulou, A., Meletis, Z. A., Margaritoulis, D., & Spotila, J. R. (2017), Caught in the same net? Small-scale fishermen's perceptions of fisheries interactions with sea turtles and other protected species. *Frontiers in Marine Science, 4(180),* 1-15. doi:http://dx.doi.org/10.3389/fmars.2017.00180

Popke, E. J. (2003). Poststurcturalist ethics: Subjectivity, responsibility and the space of community. *Progress in Human Geography, 27*(3), 298-316.

Popke, E. J. (2006). Geography and ethics: Everyday mediations through care and consumption. *Progress in Human Geography, 30*(4), 504-512.

Pramod, G., Nakamura, K., Pitcher, T. J., & Delagran, L. (2014). Estimates of illegal and unreported fish in seafood imports to the USA. *Marine Policy, 48*(0), 102-113. doi:http://dx.doi.org/10.1016/j.marpol.2014.03.019

Rare. (2018). Conservation on a human scale. The rare approach: Community-based solutions for global conservation. Retrieved from: https://www.rare.org/sites/default/files/RareApproachWEB.pdf

Read, A. J., Drinker, P., & Northridge, S. (2006). Bycatch of marine mammals in U.S. and global fisheries. *Conservation Biology, 20*(1), 163-169.

Robbins, P. (2012). *Political Ecology: A Critical Introduction* (2nd ed.). Malden, MA; Oxford, UK; Chichester, West Sussex: Wiley-Blackwell.

SanClements, M. (2014). *Plastic Purge*. New York: St. Martin's Griffin.

Sarker, S., Lau, F., & Sahay, S. (2001). Using an adapted grounded theory approach for inductive theory building about virtual team development. *Database for Advances in Information Systems, 32*(1), 38-56. Retrieved from http://heim.ifi.uio.no/~sundeeps/publications/GTVT.pdf

Schenk, A., Hunziker, M., & Kienast, F. (2007). Factors influencing the acceptance of nature conservation measures - a qualitative study. *Jounal of Environmental Management*, 66-79.

SeaChoice.org. (2014). Search Sustainable Seafood - Shrimp. Retrieved from http://www.seachoice.org/fish/find/?q=shrimp&r%5B%5D=1&r%5B%5D=2&r%5B%5D=3

Sea Turtle Conservancy. (2012). Florida's Sea Turtle License Plate. Retrieved from http://www.helpingseaturtles.org/index.php

Sea Turtle Conservancy. (2015). Tortuguero National Park, Costa Rica. Retrieved from http://www.conserveturtles.org/volunteer-research-programs.php?page=tortnp

Sea Turtle Inc. (Producer). (2015). Sea Turtle, Inc. Twitter page #tinyturtleTuesday. Retrieved from https://twitter.com/seaturtleinc

Seaturtle.org. (2014a). Groups. Retrieved from http://www.seaturtle.org/groups/

Seaturtle.org. (2014b). Sea Turtle Directory. Retrieved from http://www.seaturtle.org/people/

Sea Turtle Restoration Project. (2014). Bag the Plastics. Retrieved from http://seaturtles.org/section.php?id=126

SEEtheWILD. (2014). Wildlife tours & volunteer vacations that support wildlife conservation Retrieved from www.seethewild.org

SEETurtles.org. (2014). See turtles protects endangered sea turtles through unique conservation and volunteer trips, education, and out billion baby turtles initiative. Retrieved from www.seeturtles.org

Seminoff, J. A. (2011). President's report from the 31st Annual Symposium on Sea Turtle Biology and Conservation "The Next Generation of Research and Conservation", 10 - 16 April 2011, San Diego, California, USA. *Marine Turtle Newsletter, 2014*(February 18). Retrieved from http://www.seaturtle.org/mtn/archives/mtn130/mtn130p30.shtml

Senko, J., Schneller, A. J., Solis, J., Ollervides, F., & Nichols, W. J. (2011). People helping turtles, turtles helping people: Understanding resident attitudes towards sea turtle conservation and opportunities for enhanced community participation in Bahia

Magdalena, Mexico. *Ocean & Coastal Management, 54*(2), 148-157. doi:http://dx.doi.org/10.1016/j.ocecoaman.2010.10.030

Silk, J. (1998). Caring at a distance. *Ethics, Place and Environment 1*, 165-182.

Simon, G. L., & Alagona, P. S. (2013). Contradictions at the confluence of commerce, consumption and conservation; or, an REI shopper camps in the forest, does anyone notice? *Geoforum, 45*, 327-338. doi:10.1016/j.geoforum.2012.11.022

Snopes.com. (2010). Poached Eggs. Retrieved from http://www.snopes.com/photos/animals/seaturtles.asp

Sowards, S. K., Tarin, C. A., & Upton, S. D. (2017). Place-based dialogics: Adaptive cultural and interpersonal approaches to environmental conservation. *Frontiers in Communication*, *2*. doi: 10.3389/fcomm.2017.00009

The State of the World's Sea Turtles. (2015). Act at home. Retrieved from http://seaturtlestatus.org/act/at-home

Stead, M., McDermott, L., MacKintosh, A. M., & Adamson, A. (2011). Why healthy eating is bad for young people's health: Identity, belonging and food. *Social Science & Medicine*, *72*(7), 1131-1139.

Stern, P. C. (1997). Toward a working definition of consumption for environmental research and policy. *Environmentally significant consumption: Research directions*, 12-35.

Thompson, E. P. (1993). *Customs in Common*. New York: New Press.

Tracy, S. K. (2005). The graffiti method. *Australian Midwifery, 18*(3), 22-26. doi:http://dx.doi.org/10.1016/S1448-8272(05)80026-4

Troëng, S., & Rankin, E. (2005). Long-term conservation efforts contribute to positive green turtle Chelonia mydas nesting trend at Tortuguero, Costa Rica. *Biological Conservation, 121*(1), 111-116. doi:http://dx.doi.org/10.1016/j.biocon.2004.04.014

Tucker, T., Belskis, L., Panagopoulou, A., Rees, A., Frick, M., Williams, K., . . . Stewart, K. (2013). *Proceedings of the Thirty-third Annual Symposium on Sea Turtle Biology and Conservation*. (NOAA Technical Memorandum NOAA NMFS-SEFSC-645). Retrieved from http://www.seaturtlesociety.org/docs/33turtle.pdf.

Turtle Foundation. (2013). Please help stop the slaughter of turtles in Bali. Retreived from https://www.turtle-foundation.org/en/please-help-stop-the-slaughter-of-turtles-in-bali/

Turtle Island Restoration Network. (2014). Volunteer! Retrieved from https://seaturtles.org/take-action/environmental-volunteer/

Turtle Island Restoration Network. (2015). Welcome to the Turtle Island Store. Retrieved from http://org.salsalabs.com/o/1723/t/14336/shop/shop.jsp?storefront_KEY=1092

Urry, J. (1992). The tourist gaze "revisited". *American Behavioral Scientist*, *36*(2), 172-186.

Valverde, R. A. (2014). Report: 34th Annual Symposium on Sea Turtle Biology and Conservation, 10-17 April 2014, New Orleans, USA. *Marine Turtle Newsletter, 142*, 20-22. Retrieved from http://www.seaturtle.org/mtn/archives/mtn142/mtn142-8.shtml

Veblen, T. (1899). *The Theory of the Leisure Class*. New York: Macmillan.

Wallace, B. P., DiMatteo, A. D., Bolten, A. B., Chaloupka, M. Y., Hutchinson, B. J., Abreu-Grobois, F. A., . . . Mast, R. B. (2011). Global conservation priorities for marine turtles. *Plos One, 6*(9), e24510. doi:10.1371/journal.pone.0024510

Warden, M. L. (2011). Modeling loggerhead sea turtle (Caretta caretta) interactions with US Mid-Atlantic bottom trawl gear for fish and scallops, 2005–2008. *Biological Conservation, 144*(9), 2202-2212. doi:http://dx.doi.org/10.1016/j.biocon.2011.05.012

Waters, R. D., & Jamal, J. Y. (2011). Tweet, tweet, tweet: a content analysis of nonprofit organizations' Twitter updates. *Public Relations Review, 37*(3), 321-324. doi:http://dx.doi.org/10.1016/j.pubrev.2011.03.002

Wiener, C. S., Manset, G., & Lemus, J. D. (2015). Ocean use in Hawaii as a predictor of marine conservation interests, beliefs, and willingness to participate: an exploratory study. *Journal of Environmental Studies and Sciences*, 1-12.

Wilson, C., & Tisdell, C. (2003). Conservation and economic benefits of wildlife-based marine tourism: sea turtles and whales as case studies. *Human Dimensions of Wildlife, 8*(1), 49-58. doi:10.1080/10871200390180145

Wright, K. B. (2005) Researching internet-based populations: Advantages and disadvantages of online survey research, online questionnaire authoring software packages, and web survey services. *Journal of Computer-Mediated Communication*, 10(3), https://doi.org/10.1111/j.1083-6101.2005.tb00259.x

WWF. (2014). Fact Sheet: Bycatch. In W. International (Ed.), (pp. 1-4). Switzerland: WWF International.

Young, E. H. (2003). Balancing Conservation with Development in Marine-Dependent Communities: Is Ecotourism an Empty Promise? In K. S. Zimmerer & T. J. Bassett (Eds.), *Political Ecology. An Integrative Approach to Geography and Environment-Development Studies* (pp. 29-49). New York and London: The Guilford Press.

Zavala-Norzagaray A. A., Aguirre A. A., Velazquez-Roman J., Flores-Villaseñor H., León-Sicairos N., Ley-Quiñonez C. P., Hernández-Díaz L., & Canizalez-Roman A.(2015). Isolation, characterization, and antibiotic resistance of Vibrio spp. in sea turtles from

Northwestern Mexico. *Frontiers in Microbiology,* 6, https://www.frontiersin.org/article/10.3389/fmicb.2015.00635, doi: 10.3389/fmicb.2015.00635

Žydelis, R., Wallace, B. P., Gilman, E. L., & Werner, T. B. (2009). Conservation of marine megafauna through minimization of fisheries bycatch. *Conservation Biology, 23*(3), 608-616. doi:10.2307/29738777

Appendix A – Survey

Thank you for participating in this survey which is available through FluidSurveys.com; it takes 30-35 minutes to complete.

My name is Cherise Chrispen and this survey is part of my Masters research on consumption-related behaviours and beliefs within sea turtle conservation through the University of Northern British Columbia (UNBC). The results will be used in my academic research and related publications and presentations, and potentially, used by my supervisor, Dr. Zoë A. Meletis, in her research and related publications and presentations. As well, I hope to present these results to the international sea turtle conservation community at the 2015 Annual Symposium on Sea Turtle Biology and Conservation.

The names of the voluntary participants will remain confidential; the information will only be presented in the form of an aggregate data set (data summary). If you would like a summary of the results via e-mail, please include your contact information at the end of the survey. Your name or email will not be attached to the survey responses. Contact information will be stored in my university office, and on my password protected computer, and will only be used for the purposes of forwarding results to you.

- Please take as long as you need to complete the survey.
- Please feel free to skip questions that you do not wish to answer.
- Please feel free to stop at any time.

Please be aware that by completing this survey you are agreeing to participate in this research project. As your name will not be attached to your survey responses, I may not be able to remove your survey if you change your mind about your participation at a later date. All information collected will be stored on the secure UNBC server as well as on my password protected laptop. All printed material will be stored in a locked cabinet in my UNBC office which is locked when no one is in it. The access to this information is limited to myself and my supervisor.

If you have any questions or inquiries about this survey or my thesis project, please feel free to contact me and my supervisor. I can be reached at chrispen@unbc.ca and my supervisor, Dr. Zoë A. Meletis, can be reached at 1-250-960-5920 or zoe.meletis@unbc.ca. If you have concerns or complaints, please contact the Office of Research at the University of Northern British Columbia at 1-250-960-6735 or reb@unbc.ca.

1) Do you consider yourself to be North American? (please choose only one answer) (Prompt if no is chosen: Thank you for your participation. As this survey is limited to North Americans, you do not need to fill out the rest of the survey.)
a) Yes b) No

2) How would you describe your role within sea turtle conservation?

Please choose 1 that best describes your position:		Please choose an affiliation (if applicable):	
Researcher	Intern	University	NGO
Educator	Volunteer	Government	School
Assistant	Coordinator	Aquarium	
Administrator	Student		
Other:		Other:	

3) How long have you been actively involved in sea turtle conservation? (please choose only one answer)
a) Less than 5 years
b) 6 - 10 years
c) 11 – 15 years
d) More than 15 years

4) How did you first get involved in sea turtle conservation?

5) In your opinion, what are the three greatest threats to sea turtle conservation today? Place them in priority order with 1 being the greatest threat. Explain your number 1 choice. Why is it the top threat?

6) If a North American neighbor were to ask you what they can do to help sea turtle conservation, what three things would you suggest? Why would you suggest these?

7) In your opinion, which types of sea turtle conservation measures are the most effective for sea turtle conservation?

8) Can you think of any forms of consumption that can benefit sea turtle conservation? Please provide an example or two.

9) In your opinion, what is the greatest barrier in convincing North Americans to limit their consumption of plastics? Please explain why you think this.

10) Please name three ways that people can reduce the number of plastic bags they take home from stores? Which, if any of these ways, are used by your friends and family?

11) Think of programs, campaigns or other efforts that you have seen (for example, at a grocery store, supermarket, or restaurant) that help people make better sea turtle friendly

seafood consumption choices. Please provide an example or two of these programs. Do you think these programs are effective?

12) When is the last time you purchased a reusable plastic bottle? (please choose only one answer)

a) Less than 6 months ago
b) 6 months to 1 year ago
c) More than 1 year ago
d) Never

13) How often do you think the average North American purchases a disposable plastic bottle? (please choose only one answer)

a) Several times per week
b) Once or twice per week
c) Once every 2 weeks
d) Once every 4 weeks
e) Less than every 4 weeks
f) Other: _____

14) Think of a situation where due to unforeseeable circumstances you could not recycle a plastic bottle or bag (e.g. plastic bag is contaminated or too thin/fragile to wash), describe how you would feel.

15) Think of attending a party or event outside of your sea turtle conservation social circle where shrimp is being served, please choose your most likely course(s) of action:

a) I would not eat shrimp.
b) I would ask host/hostess if he/she used shrimp caught in a sea turtle friendly manner.
c) I would use it as an opportunity to educate party goers
d) Other: _____

How might you feel in that situation?

16) If you had a magic wand, what are three things you would change about North American consumption practices? Place them in priority order with 1 being the most important change. Please explain your number 1 choice - Why is it the most important?

17) Can you think of examples within sea turtle conservation where North American consumption is viewed as being harmful? (prompt if needed: banning of plastic bags in communities in order to curb plastics consumption/use)

18) Can you think of examples within sea turtle conservation where North American consumption is viewed as helpful? (prompt if needed: purchase of sea turtle license plate to promote and support sea turtle conservation)

19) Are there restaurants in your North American home community that DO serve sustainable seafood?

a) Yes

b) No
c) Do not know
d) Not applicable

20) Why do you think North American consumers continue to purchase items such as plastics and non-sea turtle friendly seafood?

21) Have you made any changes to your own consumption behaviours as the result of working in sea turtle conservation? Can you offer details?

22) Do you have any final thoughts or comments you would like to share about North American consumption when you consider your work with sea turtles?

23) Some of the international sea turtle conservation community members argue that the Annual Symposium on Sea Turtle Biology and Conservation should occur every two or three years, for example, instead of every year.

a) One of the main arguments is that this will help to reduce the carbon footprint of the conference and any associated negative environmental impacts. What do you think about hosting Symposia less frequently than annually as a way to reduce negative impacts associated with hosting the Symposium every year, and why?

b) Another argument is that attendees from around the world have different salaries, disposable incomes, and institutional support (including funding) to participate in the Symposium. Some members feel that hosting every two or three years, for example, would make attending more possible, more accessible, and more affordable for those with fewer resources (especially many attendees from developing countries or the Global South). What do you think about this suggestion, and why?

24) Another conversation that seems to be gaining ground again within the international sea turtle conservation community is whether sustainable (i.e. managed as per 'best science' and in consideration of local practice) directed takes of recovering or recovered sea turtle populations for use and consumption should be allowed. What do you think about the idea that the international sea turtle conservation community should be having more discussions about directed takes, in the context of global conservation successes? Are you for, against, or neutral to this idea, and why?

Participant Profile

The following information will be used to analyze the relationships between demographic information such as age category, gender and occupation, and perceptions of consumption and sea turtle conservation.

Current country of residence: _____

Country within North America you consider yourself belonging to:
_____

State or province you consider yourself from: _____

Do you live at a coastal or non-coastal location? (please choose only one answer):

a) Coastal b) non-coastal

Your age category (please choose only one answer):

a) 19-29
b) 30-39
c) 40-49
d) 50-59
e) 61 and older

Gender: Female _____ Male _____ Other _____

Occupation (may be the same or different as question 2 in survey): _____

Approximate annual household income in US dollars (please choose only one answer):

a) under $25,000 b) $25,000- 49,999 c) $50,000- 74,999 d) $75,000- 99,999
e) $100,000- 149,999 f) $150,000 – 199,999 g) $200,000 and above

---

THANK YOU
for your participation
(a $1 US donation to the ISTS student award fund will be made)
and for your work helping sea turtles!

If you would like to receive information regarding the results of this study, please include your name and email address here. This information will only be used for such purposes:

Name: _____

E-Mail:_____

Appendix B – ISTS Letter of Support

INTERNATIONAL SEA TURTLE SOCIETY

Wednesday, March 19, 2014

To the University of Northern BC Research Ethics Board:
I am writing on behalf of the International Sea Turtle Society (ISTS) to express support for the research project proposed by Ms. Cherise Chrispen:
Thinking closer to home: Considering consumption-related beliefs and behaviours of North American sea turtle conservation practitioners.

The proposed work is innovative in explicitly seeking and analyzing the information on the interface between vocation, avocation and action in the sea turtle conservation field. The study is very timely as it comes at a point when the ISTS is undergoing some fundamental changes and seeking to know and understand the interests and motivations of our members more fully. Ms. Chrispen's research has the potential to make an important contribution to the field of human dimensions in conservation, and to provide valuable information and insights to the ISTS on our membership. Her proposal has been reviewed and sanctioned by the ISTS Executive Committee and it is our hope that she will be permitted to carry out the study as planned.
Thank you for your consideration in this matter.

Sincerely,

Roldán A. Valverde Espinoza, PhD
President
International Sea Turtle Society

Associate Professor of Biology
Southeastern Louisiana University
Hammond, Louisiana
Office: 985-549-3029

Blown up portion of writing:

ROLDAN.VALVERDE@SELU.EDU

YAKUP KASKA (TURKEY)
PRESIDENT-ELECT
CARETTA@PAU.EDU.TR

RAY CARTHY (USA)
PAST PRESIDENT
NGOSI@UFL.EDU

TERRY MEYER (INDIA-USA)
TREASURER
TOPSAILSEATURTLE@AOL.COM

MANJULA TIWARI (USA)
SECRETARY
MANJULA.TIWARI@NOAA.GOV

BOARD OF DIRECTORS:

ALEJANDRO FALLABRINO (URUGUAY)
AFALLA7@GMAIL.COM

CYNTHIA LAGUEUX (USA)
CLAGUEUX@WCS.ORG

GEORGE BALAZS (HAWAII)
GABALAZS@HONLAB.NMFS.HAWAII.EDU

JACK FRAZIER (USA)
KURMA@SHENTEL.NET

JESUS TOMAS (SPAIN)
JESUS.TOMAS@UV.ES

MARK HAMANN (AUSTRALIA)
MARK.HAMANN@JCU.EDU.AU

PAOLO CASALE (ITALY)
PAOLO.CASALE@TISCALI.IT

ALIKI PANAGOPOULOU (GREECE)
ALIKI@ARCHELON.GR

PAMELA PLOTKIN (USA)
PLOTKIN@NEO.TAMU.EDU

BRYAN WALLACE (USA)
WALLACE@OCEANICSOCIETY.ORG

Wednesday, March 19, 2014

To the University of Northern BC Research Ethics Board:
I am writing on behalf of the International Sea Turtle Society (ISTS) to express support for the research project proposed by Ms. Cherise Chrispen:
Thinking closer to home: Considering consumption-related beliefs and behaviours of North American sea turtle conservation practitioners.

The proposed work is innovative in explicitly seeking and analyzing the information on the interface between vocation, avocation and action in the sea turtle conservation field. The study is very timely as it comes at a point when the ISTS is undergoing some fundamental changes and seeking to know and understand the interests and motivations of our members more fully. Ms. Chrispen's research has the potential to make an important contribution to the field of human dimensions in conservation, and to provide valuable information and insights to the ISTS on our membership. Her proposal has been reviewed and sanctioned by the ISTS Executive Committee and it is our hope that she will be permitted to carry out the study as planned.
Thank you for your consideration in this matter.

Sincerely,

Roldán A. Valverde Espinoza, PhD
President
International Sea Turtle Society

Associate Professor of Biology
Southeastern Louisiana University
Hammond, Louisiana
Office: 985-549-3029